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Coaching for Change: Teacher Perceptions of the Impact of Personalized, Reflective Professional Development

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Coaching for Change:

Teacher Perceptions of the Impact of Personalized, Reflective Professional Development

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Abstract

Instructional coaching has become a popular form of professional development in schools. Instructional coaches are often teacher leaders with years of classroom experience but little formal training in working with adult learners. This research examined the experiences of instructional coaches and the supports they perceived were needed for success in a coaching relationship. This research also examined the experiences of the teachers being coached in order to determine teacher perception of coaching as effective professional development. Data analysis explored the themes of objectivity, credibility, listening, and communication within the coaching relationship.

Keywords: coaching, adult learning theory, student-centered learning, reflection

Dedication

This work is dedicated to my family. Without your love, support, patience, and encouragement, I would not be where I am today.

To my husband, Mike: you carried the load all those many nights and weekends I spent writing. You never let me get discouraged, and your belief in me carried me through.

To my daughters, Ally and Corinne: you are my inspiration and my joy. You (almost) always understood that the sacrifices of time and energy would be worth it in the end. Your encouragement guided me to the finish.

To my parents, Joe and Debra Downs: you always encouraged me to strive for my best. You have always been there with advice, love, and an unfailing belief in my ability to succeed.

To my beloved grandmother, Ruth Spence Wingate Downs: your legacy fuels my drive for excellence. I will continue my journey to do justly, love mercy, and walk humbly to serve others in your memory.

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Introduction

The landscape of education has found itself in need of a major change, brought about by the onset of technology and its impact on the learning process. No longer do students need to wait to gain access to information; instead, information is readily available at the click of a mouse or the tap of a finger (Sheehy & Holliman, 2018). Ferster (2014) estimated that the United States spends $57 billion dollars annually on educational technology tools and training and an additional $25 billion on internet access in schools. Despite this significant investment of financial resources, the impact of this spending has been limited (Ferster, 2014). The fundamental role of teachers is being altered, and educators find themselves unprepared or unwilling to abandon the role of imparter of knowledge in order to fulfill the role of classroom facilitator and guide. Therefore, the teachers themselves need guides, or coaches, as they navigate the changing demands of education.

To address this need, professional development has been designed and mandated for teachers. However, these offerings often fail to account for the prior knowledge and professionalism of teachers and therefore fail to reach their targeted audience and impact lasting change. They often lack ongoing support for implementation and thus "innovations [are] adopted on the surface… but [do not alter] the practice of teaching" (Fullan, 2016, p. 6). Teachers may incorporate some aspects of new a new initiative without fully realizing the intentions of the change. For example, teachers may offer students options for submitting assignments online, but the actual assignment is structured in a traditional recall and respond format. Thus, the format has changed but the teaching strategy has not.

In response to this, instructional coaching has become a popular form of professional support for today's teachers. While instructional coaching holds promise for developing insightful, reflective educators, most schools and districts do not offer formal training programs

for instructional coaches (Aguilar, 2013). Teachers who have become teacher leaders and serve as role models to others in the school are often selected for the role of instructional coach, regardless of formal preparation. Thus, many so-called coaches are unprepared to assume the role and fail to help colleagues realize their instructional goals.

Statement of the Problem

Shifts in the Field of Education

Historically, teaching has been an isolating profession. Teachers have traditionally worked in proximity to other teachers but have had little opportunity for meaningful interaction with colleagues (Costa & Garmston, 2002). Traditionally, teaching has occurred in a transfer system. Teachers have stored knowledge and transferred necessary concepts to students through direct instruction. Until recently, information was not readily available, and students depended on teachers to find, break down, and explain difficult concepts. Under this system, schools also operated as hierarchies, with administrators passing on directives to teachers who then implemented processes within their individual classrooms without much opportunity to impact the rest of the school. This traditional school structure no longer serves today's students and teachers; instead, today's schools need what Fullan (2012) termed a "learning partnership" (p. 33), a collaborative approach where teachers, students, and families are working together to create engagement for students. Advances in technology provide one way to accomplish this shift.

Technology holds the promise of shifting classroom focus from delivery of content knowledge to "…a context in which students are trained on how to find and use information, to solve problems, and to build skills" (Stingu & Iftimescu, 2016, p. 101). The pace at which technology is changing is a challenge for educators trained in traditional methods of teaching

who attempt to integrate technological tools in meaningful ways (Henriksen, Mishra, & Fisser 2016). Indeed, Gelfuso, Dennis, and Parker (2015) asserted that "education is in the midst of a monumental pedagogical shift" (p. 1) in which teachers are being asked to abandon traditional practices of isolated instruction in favor of authentic application of new knowledge. Students no longer need teachers to be the keepers of knowledge; they need teachers who can help them understand and apply knowledge to real world contexts. The goal of education should no longer be simple knowledge transfer; instead "…education needs a frame to help students and teachers develop creative thinking skills that span disciplines and use technology tools for …solutions and outcomes" (Henriksen, Mishra, & Fisser, 2016, p. 28). The goal of today's schools, then is to "prepare students to negotiate and resolve future uncertainties" (Lee & Hannafin, 2016, p. 709). Teachers must work to create students capable of innovative problem solving who are able to "reason dynamically and critically… and work collaboratively" (Lee & Hannafin, 2016, p. 709) to solve problems that may not yet even exist. Education must shift to prepare students with the skills necessary for success in today's work force. These skills, according to Tarbutton (2018), include the ability to collaborate with others, to communicate effectively, and to think critically and creatively. Students also need the ability to use technology in order to compete in today's global market. As technology connects the world, our students must be able to access and use technology meaningfully for collaborative purposes in order to effectively compete for the jobs of today. Teachers, then, need to recognize that "it is a matter of social justice" (Tarbutton, 2018, p. 4) to develop these skills in students so that they will have access to future career opportunities requiring such abilities.

To accomplish this, teachers are essentially being asked to redefine their identities as professionals, which at times creates a conflict between personal beliefs and values and the

expectations of the educational organization (Vahasantanen, 2015; Tan, Chang, & Teng, 2015). Teachers may have a hard time giving up control in the classroom and may experience an internal struggle when attempting to assume a facilitator role (Netcoh & Bishop, 2017). Teachers trained in traditional methods who have experienced career success are being asked to abandon familiar methods and to "develop another perspective on teaching and learning" (Vermunt 2014, p. 84), often without sufficient preparation or support.

Teachers who embrace the shifts in teaching practice can become "islands of innovation" (Tondeur et al., 2016, p. 110), or lone professionals attempting to revolutionize practice in a traditional school setting. Other teachers may resist change or lack skills to feel comfortable with new teaching methods, and therefore present themselves as obstacles in the way of changing practice (Stingu & Iftimescu, 2016). Teachers must learn to combine modern teaching tools with modern student-centered learning practices to truly transform teaching and, more importantly, transform learning. To accomplish this, teachers need support in the form of personalized professional development. One method of providing this is through structured instructional coaching from knowledgeable colleagues. This study seeks to determine what supports are necessary to train instructional coaches and what impact the coaching relationship has on teacher perception of professional development.

Research Questions

This study seeks to answer the following research questions:

1. How do teachers perceive themselves as coaches in a peer-coaching relationship?
2. What are teachers' perceptions of coaching as a professional development strategy?

Purpose and Significance of Study

The aim of the study is to positively support change in school culture by developing support systems for teachers implementing more learner-centered teaching practices. As change requires a renegotiation of practice, it is critical to develop "infrastructures and processes that engage teachers in developing and applying new knowledge, skills, and understandings" (Fullan, 2016, p. 27). Research shows that coaching can "help create conditions necessary for instructional practices to change and student outcomes to improve" (Aguilar, 2013, p. 8), but there is a need to further define what coaching is and how coaching can be effectively implemented in the traditional school setting.

Further, this study seeks to show the impact of meaningful collaborative reflection on the practice of both teachers and instructional coaches. Collaborative reflection allows teachers to combine knowledge of new teaching strategies with the implementation of the new teaching practices, providing them a space in which to evaluate effectiveness through a coaching conversation and continually refine technique through multiple cycles of coaching (Knight, 2007). The demands of teaching make continual reflection difficult, and therefore this study hopes to show the importance of prioritizing reflection and to suggest structures in which reflective practice is encouraged and supported (Fullan, 2016).

The ultimate goal of transforming teaching is transforming schools and revolutionizing the educational culture in which students learn. This study seeks to define effective coaching practices and ultimately define processes that can support a shift in teacher mindset, even after the coaching experience has ended. Coaching has the potential to build educator capacity and to develop teachers who are open to new thought processes and belief systems and who work to

continually refine their professional skillset (Kawinkamolroj, Triwaranyu, & Thongthew, 2015). When this is realized, educators will be empowered to truly transform our schools.

Figure 1 represents the influences on the design of the case study. The case study will investigate the roles that collaborative reflection and peer coaching can play in changing teacher attitudes toward engaging in professional development during a personalized coaching experience. This topic aligns with my personal goals for redefining the way teachers engage in professional growth activities and a desire to influence the shift in modern teaching and learning to leverage student centered learning practices in meaningful ways.

Conceptual Framework

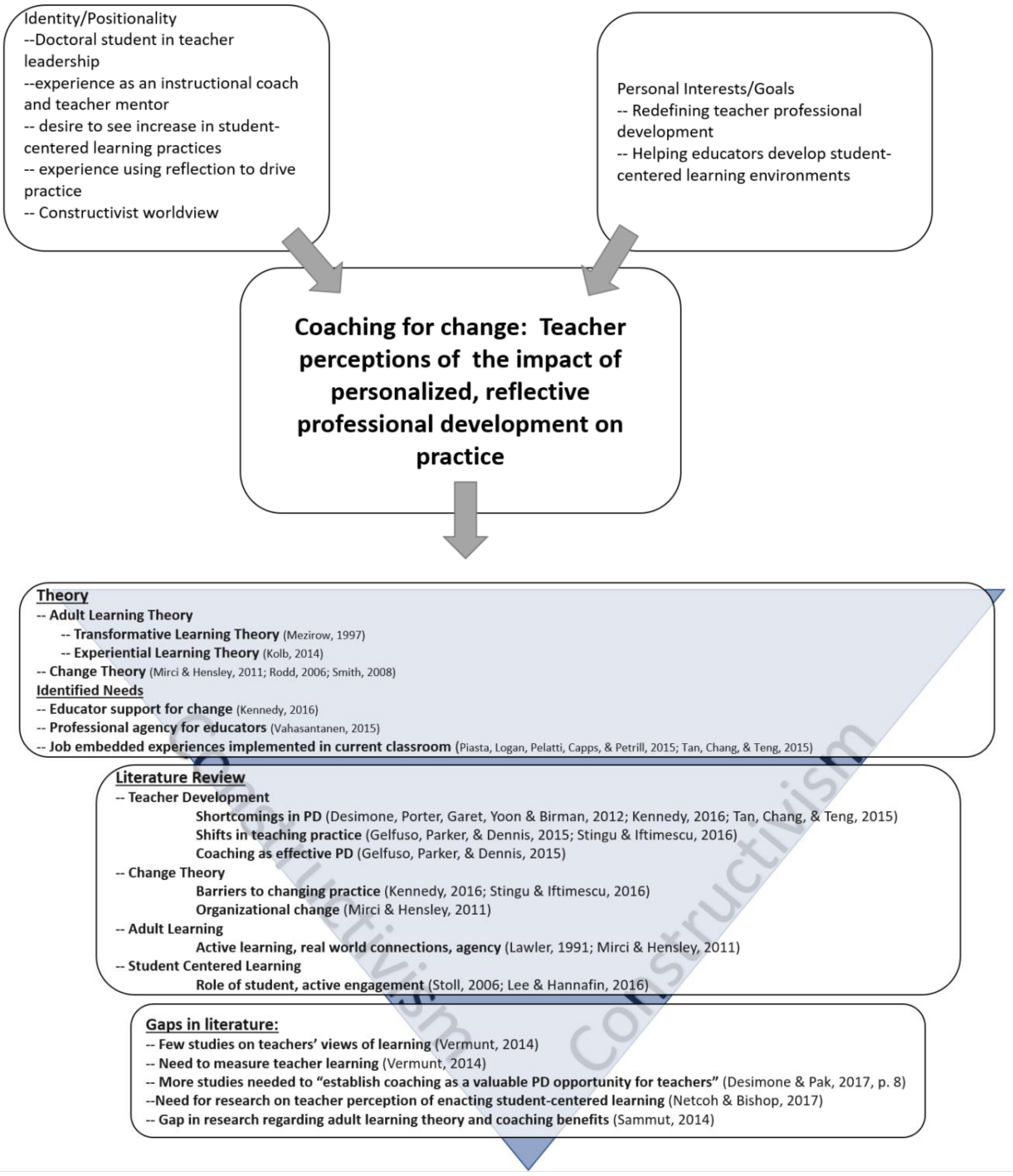

Figure 1. Conceptual Framework

Personal Connection to the Research

My personal influences include a background as a student of teacher leadership and a history of experience helping others integrate student-centered learning methods in practice, as well as a constructivist worldview in which I believe that "individuals develop subjective meanings of their experiences" (Creswell, 2014, p. 8). The constructivist perspective places emphasis on active construction of knowledge "via interactions with [the] environment as well as other encounters and past experiences" (Lee & Hannafin, 2006, p. 709). Thus, every past experience shapes what learners understand about new knowledge and how new knowledge is integrated into existing realities. My goal will be to understand and make sense of the realities presented by the research subjects and to explore the process of acquiring and integrating new knowledge in a constructivist learning experience.

I identified a number of themes related to my topic. I looked at shortcomings in current professional development models, such as a disconnect between theory and practice and a lack of follow-up for sustained implementation. Teachers, as Lortie (1975) identified, see content offered as too far removed from the classroom reality to be useful and experience frustration with incorporating utopian ideals into classroom reality. This study seeks to bridge that gap by examining the support that can be offered by teacher leaders in a coaching relationship.

My research on adult learning identified the importance of making connections with adult learners and creating buy-in for change efforts. Adult learners require a real-world connection and maintain a sense of urgency, needing new learning to apply directly and immediately to current classroom contexts. Likewise, research into student-centered learning practices highlighted the fact that students, too, need to know why learning is important and need to feel

that they are active participants in designed learning experiences. Therefore, teachers are also students who need to be afforded the same best practices in instruction that they are being asked to deliver to the younger learners in their charge.

Because teachers' existing knowledge of teaching has been formed through past experience as a student, these experiences have become the foundation of the adult teacher's identity (Lortie, 1975). Working in a traditionally isolating profession has provided the teacher no opportunity to challenge these long-held beliefs, and these beliefs have become intertwined with the educator's sense of self-efficacy. Thus, teachers continuing to engage in more teacher-led techniques are resisting change from a standpoint of self-preservation and an effort to avoid a crisis of professional identity. Redefining the profession will require finding ways to combat teacher isolation and ways to provide the members of the profession with a collective standard for best practice in the field.

Review of Relevant Terms

Collaboration

Collaboration is a partnership between professionals that is based on mutual respect for each teacher's professionalism. Collaboration between and among teachers involves open dialogue, trust, and the absence of top-down directives and judgment (Knight, 2007).

Experiential Learning Theory

Emphasis is placed on the learning process rather than the intended outcome of the learning. The process of learning guides the learner to new understandings, and knowledge is obtained as a result of experience (Kolb, 2014).

Instructional Coaching

Instructional coaches work alongside teachers to provide support for the implementation of teaching best practices in the classroom. Instructional coaches work in a non-evaluative capacity and seek to help cooperating teachers set and attain professional goals. Instructional coaches can offer support for a variety of topics, including content specific strategies, classroom management techniques, and general instructional enhancement (Knight, 2007).

Reflection

According to Dewey (1933), "reflection can be defined as 'an active, persistent, and careful consideration of any belief or supposed form of knowledge in light of the grounds supporting it and future conclusions to which it tends'" (as cited in Yaman, 2016, p. 437). Essentially, reflection is thinking critically about concepts or actions in order to make meaning of experiences and further personal growth.

Reflective Practice

Reflective practice is an educator's critical evaluation of his or her own actions and decisions during the teaching process. Reflective practitioners perform a "deliberate act of inquiry" (Kalchman, 2015, p. 3) in regard to teaching practices in order to determine future actions that can positively impact the classroom environment and teaching practices.

Peer Coaching

Peer coaching is a form of support provided by colleagues who are themselves still serving in a classroom teacher role. Peer coaches can offer unique insight as they, too, are continuing to navigate the complexities of classroom teaching. Peer coaches can offer support through modeling, mutual observation or practice, and collegial conversations about classroom realities (Zepeda, 2012).

Student-Centered Learning

Students in student-centered learning environments are active participants, engaged in exploration and inquiry rather than passive knowledge transfer (Çubukçu, 2012). In student-centered learning environments, student needs are at the center of the learning experience. Student interests and learning styles are taken into account, and students have voice in how the learning takes place. Inquiry equips learners with skills to think critically, to solve problems, and to adapt to the ever-changing world outside the classroom in order to help them develop the skills they will need to be successful as adult learners (Kay, 2010).

Transformative Learning Theory

Learners make meaning by incorporating new learning into frames of reference through a process of reflection and analysis. Transformative learning asks learners to challenge and expand existing beliefs in order to expand understanding (Mezirow, 2009).

Summary

The changes in the field of education demand much from today's teachers. Teachers are asked to challenge existing beliefs and broaden current frames of reference, often without sufficient guidance and support. Attempts at providing support through professional development often fall short of their anticipated goals, leaving educators with little sense of the value of changing practice (Fullan, 2016). To address this need, teachers need to be approached with a respect for their professional knowledge, using a framework that honors the teacher's current reality. This support can be provided through effective instructional coaching.

Organization of Study

Chapter 1 introduces the context and overview of information relevant for this study. Changes in the field of education and shortcomings of traditional professional development

models are explored. The conceptual framework provides a foundation for the literature review to follow in Chapter 2. Chapter 2 will explore teacher development, high quality professional learning, the needs of adult learners, the importance of creating a student-centered learning environment, and the change theories involved in shifting teaching practice. Chapter 3 will outline the case study methodology and rationale for the design and instrumentation used. Chapter 4 will present the research findings. Chapter 5 will discuss the interpretations of the research and examine the findings and implications for future practice.

CHAPTER 2: REVIEW OF LITERATURE

Introduction

This literature review includes the theoretical basis for the study as well as topical research relating to professional development, adult learning, educational reform, and student-centered learning. These topics provide an overview of the study's importance and the foundation from which the research was developed. This study seeks to add to the body of knowledge of principles of successful professional development and instructional coaching in order to drive school reform.

Theoretical Framework

Adult learning theory informs this research process. Adult Learning Theory recognizes key ways in which adult learners differ from their younger counterparts. Knowles, Swanson, and Holton (2005) identified these key areas in their work on andragogy, which can be defined as "any intentional and professionally guided activity that aims at a change in adult persons" (p 60). Adult Learning Theory promotes the idea that adult learning is more complicated than simple fact memorization or conceptual understanding. Adult learners must make personal connections to learning and must be able to integrate new knowledge into existing thought structures in order to make sense of what is learned. Adult learning is a "multidimensional phenomenon…[taking] place in various contexts" (Merriam, 2008, p. 97), meaning that adults must apply learning in a variety of life situations and reflect on experiences and outcomes in order to truly make meaning.

According to Knowles, Swanson, and Holton (2005), adults are self-directed learners who bring their life experiences to the learning process. While children identify themselves mainly through external relationships and connections such as family membership and school, club, and organizational memberships, adults define themselves in relation to the experiences

they have had. Experiences become part of an adult learner's self-concept, and thus failing to take adult learners' experiences into account "will [be perceived as] rejecting not only their experience, but rejecting themselves as persons" (p. 67). The experiences adults bring to the learning process should be acknowledged and used to provide a rich foundation for personalizing learning based on the knowledge and skills adults possess.

Adults often engage in learning in order to solve immediate problems, and adult learners have a desire to immediately use new learning and apply it to real-life contexts (Mirci & Hensley, 2011). Adult learners may begin learning for specific purposes or to fulfill a specific role, as opposed to younger students who work to accumulate a foundational knowledge base over the course of many years. However, like children, adults are often required to participate in learning activities on topics not of their choosing. Adult learning activities may include professional development and training sessions mandated by the school or system. The key to engaging adults in these experiences is to tie new learning to previous experiences and to present the learning in such a way as to make it applicable to current needs (Knowles, Swanson, and Holton, 2005). Adult learners are often fulfilling a host of roles simultaneously, and education is only one of many responsibilities needing attention (Lawler, 1991). Adult learning, then, is best understood as it is situated in the greater context of the adult's life situation, experiences, and beliefs. More than simple knowledge acquisition, "learning is construed as a much broader activity involving the body, the emotions, and the spirit as well as the mind" (Merriam, 2008, p. 97) and all aspects must be considered when designing appropriate learning experiences.

Experiential and Transformative Learning Theories are the two main applicable branches of Adult Learning Theory that will drive this process. Experiential Learning Theory derives its origins from the works of Dewey (1938) and Piaget (1970). Experiential learning places

emphasis on the learning process rather than the learning outcome. The experience of learning continually reshapes the learner's understanding, and "learning is described as a process whereby concepts are derived from and continuously modified by experience" (Kolb, 2014, p. Chapter 2, Characteristics of Experiential Learning Section). Experiential learning is a constructivist concept, as knowledge is created by the learner as a result of personal experience with content. In the case of teacher professional development, teachers would experience learner-centered activities designed to build on personally-identified needs through a supportive, collaborative coaching relationship. Teachers would then engage in reflection with peers, allowing new meaning to develop as a result of critical peer conversations on practice.

Proponents of Experiential Learning Theory believe that an individual's personal experiences are key for creating new learning and incorporating new learning into practice. In this theory, "Learning is seen as a process, not a result. Learning occurs through interconnected experience in which knowledge is modified and reformed" (Dernova, 2015, p. 54) so that the adult learner develops new understandings based on the experience and the learner's reflection on that experience. Developed by Kolb (1971), experiential learning "presents the process of… learning as a cycle or helix where the student passes all stages: experiencing, reflection, thinking and action" (Dernova, 2015, p. 54). This belief aligns with the reflection cycle, in that teachers must continually evaluate experiences and incorporate existing beliefs into new practice. Within Experiential Learning Theory, reflection is seen as a key component of the learning process. Individuals are asked to prepare for learning experiences, complete the experience, and then reflect on outcomes. This cycle creates learning (Dernova, 2015). The principles of Experiential Learning Theory view learning as a process which is grounded in the experience of the learner. Learning is viewed as a way of resolving conflict between different ways of knowing and occurs

as a result of a series of "interactions between the person and environment" (Strange & Gibson, 2017, p. 88). Learning cannot occur, then, in isolation but must be a result of reflection on both thoughts and actions. Adult learners experience situations or encounter knowledge that is in contrast to what they believed to be true and then must proceed through a process of "abstract conceptualization, reflective observation, and active experimentation" (Strange & Gibson, 2017, p. 88) to modify their existing knowledge structure and truly gain a new understanding.

Transformative Learning Theory emphasizes the need for individuals to make personal meaning of new learning experiences. Transformative learning requires adults to do more than acquire facts. Adults must then incorporate new learning into "already well-developed symbolic frame[s] of reference, an active process involving thoughts, feelings, and dispositions" (Mezirow, 1997, p. 10). Thus, adults use existing knowledge to process and determine the impact of new learning. Through analysis and reflection on new ideas, adult learners can transform existing belief structures to include the new influence (Kawinkamolroj, Triwaranyu, & Thongtew, 2015).

Transformative Learning Theory contends that participants' experiences have the capability to result in "transformation of perspectives" (John, 2016, p. 270) based on the reflection process. This theory, proposed by Jack Mezirow (2009), details the conditions necessary for learning to take place and is contingent upon the growth mindset of the participant, a belief that "attributes are changeable due to efforts and accumulated experiences" (Kawinkamolroj, Triwaranyu, & Thongthew, 2015, p. 154) of those involved in the learning process. Transformative learning relies on "individual experience, critical reflection, dialogue, holistic orientation, awareness of context, [and] authentic relationships" (Sammut, 2014, p. 39). Teachers must believe that they can change aspects of practice through engaging in reflective,

collaborative learning processes and must remain open to making such changes. Teachers who fail to do so, those who maintain a closed mindset, may negatively impact the change process in schools as they resist incorporating new practices (Kawinkamolroj, Triwaranyu, & Thongthew, 2015). Transformative learning is a time-consuming process. In order to truly transform, the learning must make major changes to a learner's perspective, be able to be applied in a variety of contexts, and be sustained over time. These are requirements of "depth, breadth, and relative stability" (Hoggan, Malkki, & Finnegan, 2016, p. 51), all of which would be present in the coaching relationship described in this current study.

These theories are grounded in Constructivist learning theory. Constructivist learning theory looks at learning as "a process in which knowledge is built on a foundation or prior knowledge and thus, that learning is result from experiences and ideas" (Krahenbuhl, 2016, p. 97). Knowledge is constructed through experience and reflection on action, and meaning is made as learners engage with content and concepts. Meaning is specific to the individual learner, as he or she processes new information in relation to past experiences. Thus, Constructivists believe that meaning is subjective and is "knowledge is not discovered but constructed by the human mind" (Krahenbuhl, 2016, p. 98).

Experiential Learning Theory and Transformational Learning Theory both rely on learner reflection as a key aspect of the learning process. However, as Fendler (2003) explained, teacher reflection done in isolation can serve to reinforce rather than redefine practice. Thinking about one's experiences does not necessarily change one's views on those experiences without the addition of outside ideas and perspectives. Therefore, "One remedy is to introduce a social dimension to reflective practices" (Fendler, 2003, p. 17) in which collaboration with peers can be

used to facilitate new understanding. This reflective partnership is the foundation for the coaching process.

Change theory also informs this research process. Lewin (1951) outlined a three-phase model of change: unfreezing, moving, and refreezing (as cited in Mirci & Hensley, 2011). In the unfreezing stage, individuals or groups must experience some shift in the power balance that results in "the existing equilibrium [becoming] unfrozen by changing the balance between the driving and restraining forces" (Mirci & Hensley, 2011, p. 16). This shift allows change agents to be identified. Change agents work to reeducate while also "addressing the values, beliefs, dispositions, attitudes, and practices" (Mirci & Hensley, 2011, p. 16) of those impacted by the change. When changes become a new form of normal, refreezing has occurred. Because change often causes anxiety and stress, when faced with change, individuals may experience Elizabeth Kübler-Ross's (Kübler-Ross & Kessler, 2005, as cited in Rodd, 2015) stages of grief: shock, denial, anger, depression, acceptance, and adjustment. Adults who find themselves unable to move to the acceptance and adjustment phases may present as resistors who oppose the change by "arguing or acting in response to proposed change, rather than instigating or influencing it proactively" (Rodd, 2015, p. 91-92). In order to address this resistance, administrators must allow for teachers to express concerns and have their voices and opinions heard throughout the change process. Overlooking resistors results in a perception that their knowledge and experience is unimportant, which, as Knowles, Swanson, and Holton (2005) determined, is perceived as rejecting the person as well as the idea. Allowing for dialogue and discussion honors the professional and allows for "teachers [to] explore possibilities and become agents of their own development" (Musanti & Pence, 2010, p. 87) which gives some autonomy back to the

teacher-learner as he or she navigates the complexities of change and makes meaning based on his or her past experiences and current reality.

Fullan (2016) outlined a three-step model for educational change consisting of the stages of implementation, initiation, and continuation. At the implementation stage, schools and systems engage in a lead-up to the change. The change can be brought about from policy changes, stakeholder advocacy, or adoption of new initiatives. At the initiation phase, the change is put into practice. Factors influencing the success of implementation include the complexity of and need for the change, the buy-in from stakeholder groups, and the external governing forces involved in or impacted by the process. The final stage, continuation (or institutionalization) is where the change becomes the new standard for the organization. In order for this to occur, the change must be part of the culture of the organization and have support from trained personnel within the organization.

Review of Literature

Change Resistance

Lortie (1975) predicted an educational change scenario that is eerily accurate to today's struggles. Lortie (1975) described the "erosion of tradition" (p. 216) as a "shift toward new techniques and more frequent innovation" (p. 219) and accurately anticipated the resistance and power struggle between innovators and traditionalists that is playing out in today's schools. To combat this conflict in professional identity, Lortie (1975) also accurately noted that "firmer collegial bonds" (p. 229) among teachers would be necessary to drive the change forward and truly meet changing demands.

Rogers (2003) defined five stages of adoption of change in his *Diffusion of Innovation* model, as seen in figure 2:

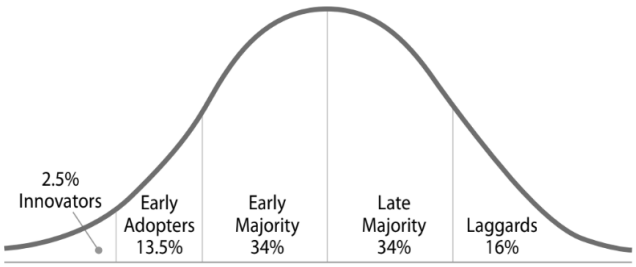

Figure 2. Categories of adopters (source: Rogers, 2003, p. 163)

According to Yuskel, (2015, p. 510), "innovators" are those who are not afraid to first test new methods and challenge existing norms. Subsequently, "early adopters" (p. 510) respect the current system but are also open to change. The "early majority" (p. 510) seeks guidance and support in the change process and is described by Yuskel (2015) as risk averse individuals who require evidence that a change is in their best interests. The "late majority" encompasses those who resist change until it becomes widely accepted, and the "laggards" represent those who will not change unless there is no other alternative (Yuskel, 2015).

Adult learners may be ingrained with "mental habits, biases, and presuppositions" (Knowles, Swanson, & Holton, 2005, p. 66) that prevent them from being open to changes that oppose these views. Because adult learners define identity in relation to experiences, changes that present contrary views could be interpreted as "rejecting not only their experience, but rejecting themselves as persons" (Knowles, Swanson, & Holton, 2005, p. 67). When this is the case, the adult learner experiences rejection of self, which halts the learner's progression toward self-actualization and true learning by violating the learner's need for belonging and self-esteem as defined by Maslow's Hierarchy of Need (1987) (as cited in Sherwin & Stevenson, 2010). Respect for the learner's experiences and self-identity in relation to those experience is key in shifting mentality within the change process. As Lortie (1975) contended, teachers will take new

ideas and evaluate them against their own self-concepts, determining worth in relation to individual experiences within the field. If an individual teacher has not experienced success with a strategy or concept, he or she is unlikely to be receptive to its potential value to others.

Teachers also resist professional development offerings that do not align to teachers' professional goals or appear to be relevant to teachers' current classroom reality. Professional development is often imposed upon teachers as a result of "changes in curriculum, policy, and the introduction of new technology or teaching materials" (Holdsworth & Maynes, 2017, p. 688) and is not a reflective of teachers' interests or past experiences, nor does it take into account teachers' beliefs about teaching and learning. As a result, teachers approach professional development with a mindset of disengagement, resulting in apathy and resistance to the learning process (Leahy & Torff, 2013).

Teachers also resist change efforts due to what Watanabe-Crockett (2019) termed "change fatigue" (p. 4). Teachers are continually inundated with new initiatives from the top down as policies change at levels in the hierarchies governing them. As Lortie (1975) observed, schools continue to be organized as a pyramid, with teachers taking orders from "full-time, physically preset administrators acting on authority delegated by school boards" (p.4), and these boards are often comprised of members with no formal training in the education field. Therefore, teachers find themselves at the mercy of shifting policies enacted by those whose only frame of reference for classroom reality is that of Lortie's (1975) "apprenticeship of observation" (p. 61), a time spent observing the classroom from a student perspective without access to the realities of the profession from the standpoint of the teacher required to implement the change.

Teacher Development

Traditional professional development. In order to encourage teachers to shift practice, a professional development effort must convince teachers that it will be in the best interest of students and that it is in line with a teacher's professional values (Tondeur et al., 2016). Educational institutions may decide on needed changes in teacher practice, but it is the teachers themselves who determine success or failure of these new initiatives. If teachers perceive new directives as too difficult to implement or feel the directives are in contrast to current values, they are likely to not place importance on implementing these new directives with fidelity in the classroom. Additionally, teachers who feel unprepared to shift practice may hesitate to experiment with implementation for fear of failure and discomfort in front of their students (Vermunt, 2014). Holdsworth and Maynes, (2017) asserted, "Teachers can feel extremely vulnerable when trying new methods" (p. 681) and therefore may avoid full implementation of professional learning in an effort to reduce emotional discomfort.

Traditional methods of professional development such as workshops, school-based meetings, and conferences often fail to address teacher isolation as a limiting factor. Teachers are expected to learn new methods of practice but rarely have the opportunity to see these teaching practices at work in the classrooms of colleagues or to receive feedback from colleagues regarding their own implementation. Current school structures of space and instructional time make meaningful collaboration difficult. Most schools lack communal space for teacher inquiry, and most schools operate on regimented time schedules in which teachers' days are highly structured with little to no flexible time for collaborative reflection on new initiatives. Holdsworth and Maynes (2017) asserted that the "classroom isolation… experienced by teachers contributes to a resistance to innovate" (p. 689) as teachers are not aware of changes in practice

of peers and therefore do not see the benefit to be derived from making changes in their own classrooms.

Teachers, too, find themselves impacted by their own apprenticeships of observation, often clinging to a teaching identity that was developed from years spent observing their own teachers in action and imagining events, reactions, and student interactions from the perspective of the teacher (Lortie, 1975). Teachers, then as Lortie (1975) contended, are often those who experienced favorable outcomes from their own time as students in the classroom and found themselves reluctant to leave a structure that suited them well in the student role. Teachers attempt to replicate their own school experiences for their students, operating under the assumption that "what worked for me…despite its possible uniqueness, will work on others" (Lortie, 1975, p. 78). This tendency to hold fast to pedagogical methods that were successful for themselves as students stands as a barrier to changing classroom practice, regardless of the quality of professional development offered. The challenge, then, is to develop and implement successful professional development where teachers can experience success from teaching methods other than those that worked for them as children in order to expand teachers' understandings of successful teaching strategies.

Lack of ongoing support for new learning is also a contributing factor in the failure of traditional professional development. Today's teachers, inundated with reform initiatives and directives for making teaching changes based on the latest trends, are provided little guidance when it comes to changing self-perceptions of effective teaching. Learning designs used in work with teachers are often mere overview sessions that do not address the meaning behind the change or the rationale for the change. Teacher development sessions lack depth, and teachers walk away with "no reason… to believe in the value of proposed changes, and few incentives

(and large costs) to find out whether a given change will be worthwhile" (Fullan, 2016, p. 26). Costs for teachers include a feeling of vulnerability in the classroom when trying something unfamiliar in front of students and a perceived threat to the teacher's self-perception of effectiveness in the field. Because education is an isolating field, teachers continue to internalize results, allowing their failures to be magnified by their belief that practice and self are intertwined (Lortie, 1975). Thus, teachers still judge strategies not as overarching best practices in the field, but as best practices for individual teachers in individual contexts within the field. The challenge, then, becomes a challenge of socialization for teachers developing opportunities for collegiality and collective understandings within the field.

High quality professional development. Just as students need teachers who can help them apply knowledge, so, to do teachers need to be able to apply their learning to their current teaching situations. Teaching is a complex profession, and one in which "teachers are expected to teach the child, deliver the curriculum, understand...policies, work with parents...and design innovative practices" (Tan, Chang, & Teng, 2015, p. 1584), all while growing themselves professionally to meet the demands of the changing educational landscape. Therefore, teachers need professional development to be explicitly linked and immediately applicable "as they struggle to adapt new curricula and new instructional practices to their unique classroom contexts" (Guskey & Yoon, 2009, p. 497). School-based learning experiences allow teachers to explore problems of practice within their classroom setting, using inquiry and reflection to "[optimize] learning from this work experience" (Smylie & Eckert, 2017, p. 566).

Teachers bring to the classroom a variety of experiences and beliefs that shape the way they approach educating students and interacting with colleagues. Indeed, "what individuals believe, and how they think and act, is always shaped by historical and socio-cultural practices"

(Vahasantanen, 2015, p. 3). Therefore, change in professional practice calls for a change in belief systems and is a more complex process than simply trying a new strategy in the classroom. True change "often requires a renegotiation of professional identity" (Vahasanantanen, 2015, p. 3) in which teachers must integrate new learning into existing practices. True change is not simply the adoption of a new concept but instead involves teachers abandoning current practices in favor of new and unfamiliar beliefs (Zepeda, 2012).

To determine if a change is advantageous, teachers must see benefits in their classrooms with their students. It is not enough to have supporting research for a new method or to see success with that method in the classroom of a peer. Lortie (1975) reported that teachers evaluate new ideas by considering their own preferences and then choose which practices resonate with them personally. Only these practices are then admitted to a teacher's toolkit of regular strategies. This suggests that there is no standardization of criteria in which new practices are evaluated; each teacher personalizes decisions for his or her own teaching preferences. There is a need for professional learning designed to provide teachers with success and support during the growth experience. Knowles, Swanson, and Holton (2005) highlighted the notion that "…significant learning is often threatening to an individual" (p. 50) and therefore learners would be more successful when provided a supportive and accepting atmosphere when challenging long-held beliefs. Because teachers replicate methods that worked for them as students, professional development aimed at shifting practice must provide teachers with successful experiences as learners in newly designed learning environments. Teachers experiencing success in learner-centered settings will then have new frames of reference for implementing learner-centered strategies within their own classrooms, as the value of these methods will then become internalized and part of their greater experience with learning.

Whitworth and Chiu (2015) contended that "teachers are … the most important factor in student achievement" (p. 125), but more research is needed to prove a direct correlation between teacher learning and student achievement. Studies do indicate that when professional development contains certain characteristics, "student achievement can be improved" (Whitworth & Chui, 2015, p. 125). These characteristics were identified by Desimone, Porter, Garet, Yoon, & Birman (2012). Three features referred to the structure of the learning: organization of learning activities, duration of the learning experience, and participation of members of the same school or team. The remaining three features related to the learning activities themselves, stating that professional development should incorporate active learning, should take into account teacher goals, and should be related to classroom content. However, Desimone et al. (2012) determined that the majority of professional learning opportunities for teachers lacked these characteristics, resulting in "professional development [that] has been ineffective and wasteful more times than not" (Fullan, 2016, p. 14). As Kennedy (2016) pointed out, offering professional development out of the classroom context and expecting learning to be applied in the classroom creates a "problem of enactment" (p. 947) in which teachers know what their new learning means but do not know how to implement the new skills in their teaching practice.

Educators need to be engaged in the learning process and offered adequate time to process and implement learning. Professional development "should promote positive attitudes within a context of instruction that is coherent, ongoing, and content focused" (Leahy & Torff, 2013, p. 111). Educators need opportunities to reflect and have dialogue with colleagues in order to effectively grow in the profession.

Peer collaboration. Teachers develop through peer collaboration, feedback, and purposeful reflection on practice. Teachers need to engage in "purposeful interaction" (Fullan, 2016, p. 108) in order to assess, implement, and reflect on new learning. Teaching has shifted from "one of the most private professions" (Costa & Garmston, 2002, p. 182) to one in which collegiality is key in supporting professional growth. Professional learning communities allow teachers to each contribute individual strengths that can positively impact the practice of peers. Professional learning communities allow teacher teams to work toward shared goals by engaging in a learning cycle of co-planning, implementation, and reflection. Teacher leaders are able to develop in supportive, trusting learning communities in which teacher voice is valued. Peer collaboration "is linked with...opportunities for continuous improvement and career-long learning" (Fullan, 2012, p. 109). Teachers working in a true professional learning community are able to continually discuss and reflect on practice while gaining insight and support from peers.

In order for teachers to be successful implementing new teaching methods, teacher support is key. Teachers who feel that their voices are heard and valued in the professional development process are more likely to buy in to new teaching methods and create lasting change in practice (Vahasantanen, 2015). Peer collaboration is a way to "give [teachers] agency in the process rather than delivering solutions from external experts" (Tondeur et al., 2016, p. 117) as they navigate the shifting expectations of the teaching profession. Peers who work in a mutually respectful and supportive way can influence each other's practice by reflecting on strengths and offering guidance on areas of growth (Gonen, 2016). Teachers who engage in professional growth alongside colleagues are provided opportunities for "collaborative inquiry"

(Leahy & Torff, 2013, p. 109) in which teachers can continually reflect, discuss, and share ideas on a daily basis.

Teacher reflection. Another component of successful professional growth is the process of meaningful reflection. As Fullan (2016) stated, "People learn not by doing per se but by *thinking* about their new doing" (p. 39). Reflection, however, is often missing from teacher practice due to time constraints and teaching demands (Fullan, 2016). A study by Yaman (2016) found no statistical difference in the reflection practices of beginning teachers versus those of experienced teachers, suggesting that the importance of meaningful reflection on practice is overlooked at all stages of the teaching profession. Peer collaboration can help address this need by providing teachers with an opportunity to engage in "collaborative, reflective practice" (Aguilar, 2013, p. 8) with a colleague.

Educator reflection on teaching is a necessary component in effecting long term change in practice. When teachers reflect on classroom implementation, they have the potential to see the true impacts of professional learning and are afforded a space in which to critique and grow (Ryken & Hamel, 2016). However, as Fendler (2003) argued, independent reflection can serve to "affirm existing beliefs" and can become an exercise in "reconfirming, justifying, or rationalizing preconceived ideas" (p. 16). Without new input, teachers are likely to view past events and actions using existing frames of reference and return to previously held beliefs about teaching concepts. One solution to this is collaborative reflection through peer conversations, professional learning community support, or working in a coaching relationship.

Much research has been done with regards to stages of reflection and phases of the reflective cycle in teaching, primarily basing the definition of reflection on the work of John Dewey. Dewey (1933) defined reflection as "'active, persistent, and careful consideration of any

belief or supposed form of knowledge in the light of the grounds that support it and further conclusions to which it tends'" (as cited in Roberts, 2016, p. 20). Jado (2015) asserted that only through reflection can learning truly transfer to practice. Jado (2015) went on to cite Dewey's defined stages of reflection as "suggestion, problem, hypothesis, reasoning and testing" (p. 92).

In more recent years, researchers have begun to further explore what stages of reflection educators truly experience and what types of reflective practice are valuable for teachers. Korkko, Kyrö-Ämmälä, and Turunen (2016) discussed the three stages of teacher reflection as descriptive, comparative, and critical. The descriptive stage begins with defining a problem and moves to the comparative stage of investigating alternate viewpoints. In the final critical stage, a teacher "evaluates different alternatives and integrates new information into his/her previous knowledge" (p. 200). Therefore, teachers must progress in the ability to reflect and the resources used for reflection. As they move deeper into the reflective process, they are able to create a transformation of teaching practice.

Liu (2015) also discussed three levels of reflection: technical, practical, and critical, with critical reflection being the most complex, desired level. Educators can engage in reflection on previous actions or transfer reflection into a part of the teaching practice (Liu, 2015). Ryken and Hamel (2016), however, refuted the view that some forms of reflection are more valuable than others. In their research, they determined that the category of reflection was less important than simply engaging in the act itself, and that each teacher is able to get what he/she needs for individual growth simply by participating in the reflective process regardless of determined reflection level.

Research consistently states that educators must be guided in the reflective process, as thinking about teaching "does not always seem to be a spontaneous activity" (Jado, 2015, p. 93).

There is a need for reflection activities to be "encouraged and guided" (Gasparic & Pecar, 2016, p. 370) in order to encourage participation and collaboration from teachers. Woodward and Nanlohy (2014) found that educators were more likely to engage in meaningful reflection when presented with a set of criteria as a framework, just as Yaman (2016) asserted that "teachers should be trained to reflect on the subject matter and the thoughtful application of … teaching strategies (p. 437-438). Kayapinar (2015) contended that reflective teachers must be developed by having educators "continually learning from their own experiences by framing problems of practice...critiquing and reframing... and taking action that is fostered by such reframing" (p. 1672). He went on to advocate for creating a "systematic, rigorous way of thinking" (p. 1673) for reflective practitioners. As Ling (2003) agreed, "reflective practice can be harder than most believe" (p. 12). Therefore, structure and guidelines, such as those found in the coaching process, are key for success.

Coaching. In current research, coaching has emerged as a way to provide support for teachers and influence practice in the teacher's actual classroom, while forming the collegial bonds described by Lortie (1975). As part of coaching, reflection is a form of self-assessment for teachers, enabling them to think through the teaching process and to identify strengths and weaknesses in practice.

The six key features identified previously by Desimone et. al (2012) emphasized the need for active, job-embedded learning for teachers. Teachers must also have a voice in their professional learning in order to be motivated to make pedagogical changes. According to Knight (2007), allowing for teacher voice honors the reality of the collaborating teacher and sends a message that "the other person's life is meaningful and important" (p. 43) in informing next steps for his or her professional development. Allowing for teacher voice, according to

Knight (2007), means "helping others express what really matters in their lives" (p. 45) and crafting these values into a vision for improving practice. In recent years, coaching has become a popular form of professional development that embraces these characteristics while supporting teachers at their sites. Coaching has emerged as a way to transform schools from the inside, supporting teachers by meeting them where they are and pushing them to the next level of competency (Aguilar, 2013). When teachers determine their driving values and work alongside a colleague who is able to help them improve practice and realize success with a personal vision, they are more motivated to achieve change (Knight, 2007).

Coaching is an on-going, supported form of professional development in which teachers work alongside teacher leaders to evaluate, revise, and improve practice (Aguilar, 2013). Coaches offer a personalized form of support that "takes into account the needs of the organization as well as the experience, maturity, knowledge, and career path of the individual" (Zepeda, 2012, p. 144) being coached. The coaching relationship offers a chance for teachers to receive meaningful, non-evaluative feedback and reflect on that feedback with a knowledgeable peer (Gonen, 2016).

Peer coaching offers a job-embedded form of professional development and allows teachers to learn from peers who understand the daily classroom environment and the pressures of daily school life. Knight (2007) outlined a "partnership approach" (p. 39) to coaching that places an emphasis on equality in the coaching dynamic and underscores the importance of teacher choice, teacher voice, open dialogue, application of learning, and reciprocity during the coaching experience. Each peer can bring strengths to the relationship, and a feeling of equity in the coaching relationship is important for teacher buy-in and success. Peers can collaborate during planning periods, after school hours, or asynchronously using a variety to technology

tools, creating what Ryken and Hamel, 2016, termed “a community of professional practice” (p. 35). Another benefit of a peer coaching relationship is that teachers are able to receive feedback in their current classrooms with their current groups of students, receiving real-time, on the job support. Offering opportunities that are “sensitive to local contexts” (Tondeur et al., 216, p. 116) creates an environment in which teachers can truly become a community of practice by responding to needs at the school level.

Peer coaches are teacher leaders who are both connected to their own classrooms and to the school as a whole. Because they work alongside other classroom teachers, they are able to lead by example and mentor by “demonstrating new teaching methods, sharing knowledge and skills, and leading school improvement as members of school task forces” (Szeto & Cheng, 2017, p. 47). The classroom is still a reality to peer coaches, and they are able to truly work with peers in a non-evaluative and authentic way. Teachers are more comfortable sharing struggles with such teacher leaders who may be able to relate problems to those they face in their own classrooms and who are “able to apply experiences and strategies from their own classrooms and have the additional credibility that comes from a peer-to-peer relationship” (Trapanese, 2017, p. 37). Peer coaches can establish a level of trust with colleagues that is not possible from an evaluative school administrator or an outside source of professional development delivery.

However, most teacher leaders who enter coaching roles are unprepared for the demands of coaching colleagues. They have not been trained in adult learning theories and have not been offered support as they transition to a coaching role. The result is a gap between the anticipated outcomes and the reality of what actually takes place in the coaching relationship (Aguilar, 2013).

Needs of Adult Learners

Knowles, Swanson, and Holton (2005) contrasted the principles of effectively teaching adults, termed andragogy, with those of traditional pedagogical models. These results are summarized in Table 1 and highlight the assumptions that form the foundational differences between the two approaches.

	Traditional Pedagogy	**Andragogy**
Need to know	Based on standards set by curriculum and teacher	Based on the "why" of learning, self-determined
Self-Concept	Learner is dependent upon the teacher	Learner is self-directed, responsible for self
Role of Experience	Experience not used as a resource in the learning process, identity is based on external definers (parents, community, group associations)	Experience is the richest resource in learning, identity is based on what experiences they have had
Readiness to Learn	Readiness based on what the teacher is covering	Readiness is based on a need to know and to be able to cope with real-life situations
Orientation to Learning	Subject-centered	Task-centered
Motivation	External (grades, teacher approval, parental pressure)	Mostly internal (satisfaction, self-esteem, quality of life), some external (promotion, salary)

Table 1. Comparison of Pedagogy and Andragogy

In traditional pedagogy, the need to know is based on what the state has determined are the necessary standards for students in a given grade or subject area and students are generally not explicitly informed of the rationale for learning the strategies or concepts taught. Conversely, adult learners have a need to begin with the rationale for the learning. Adults need to know why a concept, strategy, or skill will be beneficial for them personally and how the learning will positively impact their personal or professional lives. Secondly, traditional pedagogy places the student as dependent upon the teacher, a position reinforced by teacher expectation and

eventually the learner's self-concept. Adult learners, however, are self-directed in their personal lives, and have a need to be seen as capable and knowledgeable in the classroom setting as well. Adults who do not feel honored as self-directed learners may approach learning situations with negative expectations and resist the learning experience

The role of experience differs greatly from traditional pedagogy to andragogy as well. In traditional pedagogy, experience of the student is not acknowledged as a resource for learning. It is the teacher's experience with content that drives the instruction. Adult students, however, have a wide range of life experiences that can add value to the learning process and help inform direction for teaching. Adult experience can also pose a challenge for adult educators who must work to combat preconceived notions about the learning as well. In traditional pedagogical models, a student's readiness to learn is determined by the teacher and curriculum, in contrast with adults who begin learning in order to "learn those things they need to know in order to cope effectively with their real-life situations" (Knowles, Swanson, & Holton, 2005, p. 67). Adults are motivated to learn that which is relevant to their current needs or stage in life.

Traditional pedagogy is centered on subject matter content, while effective adult learning is task-centered and designed to meet a need or solve a problem for the adult learner. Adults need to see the connection to real life in order to engage with the learning process. Similarly, adult motivation to learn is based on a number of internal factors, such as the drive for better performance or a desire for a more positive self-concept. Adults are also motivated by some external rewards, such as salaries or job opportunities. Traditional pedagogy offers primarily external motivators for students by focusing on grades and teacher/parent approval (Knowles, Swanson, & Holton, 2005). The foundational principles of andragogy shed light on teacher resistance to traditional professional development efforts and can offer direction for future

teacher learning designs. While adult learners do, indeed, bring a variety of experiences learning, these experiences may be the very thing that creates an attitude of resistance to further engagement with new ideas.

Agency. Teacher voice is essential for teacher development. Shift in practice "depends heavily on teachers' motivation to learn and to change" (Kennedy, 2016, p. 948). As adult learners, teachers need to see the rationale behind new pedagogical practices and need to see the ways in which required changes can directly, positively impact their current teaching contexts. Adult learners bring a myriad of experiences to a professional learning situation and need to be approached with a sense of respect for their current realities. The adult learner must incorporate new learning into existing frameworks and needs to see how "new knowledge and skills [can] be related to prior learning and experience" (Zepeda, 2012, p. 54). Adult learners need to feel ownership of the learning topic and process in order to encourage buy-in for professional development efforts.

Teachers need to feel they have a voice in regard to professional growth in order to become intrinsically motivated to make changes. When teachers are provided opportunities to shape their own professional growth, they are empowered to become "agents of their own professional development and success" (Leahy & Torff, 2013, p. 108). Giving this power back to the teacher acknowledges the professionalism of the individual and honors the adult learner's need for autonomy in the learning process. Learning, too, should honor the knowledge that the adult student brings to the learning process. Adults bring a variety of life experiences to the classroom, and adult education should be "learner centered, meaning that it starts with the participants, with where they are, and takes into consideration what will be meaningful for them" (Lawler, 1991, p. 14).

Active learning. Adults are active learners and need to be supported throughout the learning process. Professional development designed to bring about true change "has follow-up to ensure transfer of new knowledge" (Zepeda, 2012, p. 49). Follow-up can come in the form of coaching, mentoring, or other purposeful peer collaboration. Learning that is job-embedded allows teachers to put new concepts into practice and to receive feedback on implementation. Reflection is a way for teachers to evaluate and make changes in application of learning. Adult learners, too, have a need to put learning to immediate use. Adult learning should result from needs expressed by the adults and be immediately applicable to the situation at hand. Engaging in collaborative inquiry with peers provides adult learners with opportunities for feedback, which can help the adult learner determine future direction for personal growth (Zepeda, 2012).

Although adults prefer learning with opportunities to directly apply skills, they may also feel vulnerable when putting skills to use. Adults are used to being competent and in charge of their own lives and need respect and support in the learning environment (Lawler, 1991). Adult learners experience discomfort with uncertainty and feel that mistakes "make them appear stupid, foolish, or incompetent" (Rothwell, 2008, p. 47). Because of this, some adults may avoid participation and will need active, ongoing encouragement to be successful with implementation.

Student-Centered Learning

Defining the need. Today's students learn in a high-stakes world, placing them at risk for anxiety, depression, and other detrimental effects of pressure to achieve (Modrek & Kuhn, 2017). Part of the drive for achievement is the value placed on high stakes tests. Yet, such tests are a poor indicator of actual competency, as they "do not establish how closely performance indicators are associated with actual learning" as opposed to rote memorization (Modrek & Kuhn, 2017, p. 12). The authors distinguished between memorization as a "skill

developed to achieve superior academic performance" (p. 19) and cognitive behaviors that promote the ability to be a learner, such as inquiry and self-regulation of behavior and learning goals (Modrek & Kuhn, 2017). They went on to note that overemphasizing grades and the importance of achievement indicators may result in the development students who are able to perform well on standardized academic tasks but do not necessarily know how to be a learner and how to apply learning skills to other contexts, skills needed for success in adult life.

Students from high-pressure school environments may exhibit "lower levels of engagement and dissatisfaction with school and even later work life" (Modrek & Kuhn, 2017, p. 19), suggesting that although students are able to memorize information, they are unable to identify the value in the learning act and are more likely to simply comply with classroom expectations without internalizing the skills necessary to effectively learn in other arenas outside of the traditional classroom setting. Success on high stakes assessments provides only a measure of competency in memorization and recall. High stakes assessments do not take into account the skills of analysis, synthesis, critical thinking, or application of knowledge, all of which are necessary for empowering students to drive their own learning experiences.

Watanabe-Crockett (2019) identified six fluencies essential for students to become successful learners in the 21st century, which are summarized below:

Information Fluency	The ability to unconsciously and intuitively interpret information in all forms and formats to extract essential knowledge, perceive its meaning and significance, and use it to complete real-world tasks (p. 60-61)
Solution Fluency	Problem solving: what you do when you don't know what to do, empowering you and preventing you from being paralyzed by the problem (p. 77)
Media Fluency	Understanding messages in media as well as how people choose to best share those media (p. 79)

Collaboration Fluency	Process of cooperatively working in teams with real and virtual partners to create original products (p. 80)
Creativity Fluency	Process designed to uncover the artistic nature in all of us (p. 82)
Global Digital Citizenship	The practice of demonstrating respect and responsibility for one-self, others, and intellectual properties of all sorts in digital environments (p. 146)

Table 2. Watanabe-Crockett's (2019) Essential Fluencies for Future-Focused Learning

According to Watanabe-Crockett (2019), students need proficiency in these skills in order to apply the learning strategies to a variety of contexts. Information fluency allows students to critically analyze various forms of information and derive meaning from content. Because information is so readily available, students need the ability to gather knowledge from a wide range of sources in order to apply learning to new tasks and situations. Solution fluency is a skill that enables students to see problems from a variety of perspectives and generate a wide range of solutions. Students skilled in solution fluency are able to see a variety of solutions to a problem and are able to anticipate future problems that could be caused as a result of a proposed solution. Media fluency allows students to see not only the meaning of a message, but also the meaning behind the message. Media fluency enables students to analyze delivery of messages and to select the best ways in which to share their own products. Collaboration fluency is the skill of working in a team, whether in face-to-face or virtual situations, in order to accomplish group goals. Creativity fluency stresses the importance of developing nontraditional solutions to problems and identifying ways in which processes or products can be continually reevaluated and refined. Lastly, skills of global digital citizenship allow students to become contributing members of the online community, by appropriately using and sharing information in respectful and productive ways. Each of these skills, or fluencies, describe an essential foundational component of modern learning (Watanabe-Crockett, 2019).

Student-centered learning has been identified as a necessary shift in practice, designed to empower learners to succeed by arming them with 21st century skills. These skills of collaboration, creativity, and problem-solving are generally not explicitly cultivated in traditional classroom settings and are not "systematically infused into standards and assessments, curriculum and instruction, or professional development and learning environments" (Kay, 2010, p. xxviii). Some students are able to develop these skills as they progress through school, dependent largely on chance assignments to classrooms where these skills are cultivated.

It is true, too, that these skills may not be unique to the 21st century, but the need for these skills to be cultivated in all students is a unique demand of our time. Historically, not all students needed these skills to be successful in jobs after school. Past economic structures emphasized the need for a hierarchy of managers who could oversee workers in an "assembly-line mentality" (Kay, 2010, p. xxi), and education for all was truly designed to identify and separate the managers and continue to focus on growing those who could lead workers to achieve company goals. Today's workplace demands a different type of worker, one who can "adapt and contribute to organizations, products, and processes with the communications, problem-solving, and critical thinking skills that enable them to customize their work and respond to organizational expectations" (Kay, 2010, p. xvii). Students desiring higher education and those entering the workforce both need the skills to evaluate, analyze, and critically apply knowledge to new situations.

Schools, however, do more than just develop workers. American schools are designed to develop citizens capable of understanding and protecting the ideals of democracy. Schools are responsible for creating citizens committed to preserving a society that values freedom of choice and decision-making, respect for multiple viewpoints, and a commitment to

the greater good (Hochschild & Scovronick, 2002). In order to realize these values, schools have an obligation to ensure every student has an opportunity to learn not only common content, but also a common skillset, a common appreciation of others, and a common understanding of democratic concepts. Students need to realize fluency in 21st century skills in order to analyze media messages, evaluate political propaganda, and apply critical thinking and analysis skills in daily decision-making (Hochschild & Scovronick, 2002).

Characteristics. The technological revolution has changed "the way we do business, the ways in which we communicate, and how we think about and use information" (Watanabe-Crockett, 2019, p. 59) as adults, and has therefore necessitated "a paradigm shift in pedagogical approaches" (Kasemsap, 2017, p. 117) toward a more student-centered learning environment. Modern learners need research and information literacy skills that are different than those used by educators during their time as students. Today's learners can easily access content but must become equipped with skills to effectively analyze and use information in order to develop into "lifelong, capable, and independent learners" (Watanabe-Crockett, 2019, p. 60).

In a student-centered learning environment, the balance of power must shift from teacher control to shared control of learning decisions. The role of the teacher becomes that of facilitator and guide. Teachers resist this shift for a number of reasons. Weimer (2013) suggested that teachers may feel this shift in role diminishes the importance of the teacher. She also asserted that teachers feel uncomfortable with the uncertainty of a learner-centered lesson, whereas students may resist this change in order to avoid taking responsibility for their own learning.

Weimer (2013) and Lee and Hannafin (2016) both asserted that sharing power with students is not equivocal to relinquishing all control of the classroom. Instead, in the learner-centered classroom, "students…are empowered to refine their learning process with support from

teachers and peers" (Lee & Hannafin, 2016, p. 710). The role of the teacher is to scaffold the release of the learning process at the rate in which learners are able to effectively take control (Weimer, 2013). Learners "actively participate in the decision-making process about what to learn, how to learn, and what kind of help is required" (Çubukçu, 2012, p. 50). Students become active participants in their educational experiences, developing the "flexible, adaptive skills essential in the 21st century" (Lee & Hannafin, 2016, p. 709).

Role of teacher. In a student-centered classroom, teachers become responsible for ensuring student autonomy in learning, scaffolding the learning appropriately, and allowing students access to authentic audiences for their work (Lee & Hannafin, 2016). These new roles represent a dramatic shift from the more traditional role of dictating learning experiences and being the sole provider of student feedback. Teachers, now, are asked to be active participants in learning alongside students, providing formative feedback and guiding students toward the realization of student-determined goals (Çubukçu, 2012). This transfer of power can create uncertainty for educators used to maintaining control of all learning decisions. However, the goal of teaching in a student-centered way is to motivate students to be the drivers of their own learning and to develop critical thinkers who are able to tackle "real world, complex, messy, and ill-structured problems in which no neatly packaged solution paths are available" (Lee & Hannafin, 2016, p. 712). It is these skills that students need to succeed in today's information-rich society.

Role of student. In such a learning environment, the role of the student becomes one of active engagement rather than passive acceptance. Students are called upon to drive the learning process based on personally identified goals. Students may struggle to embrace the shifting role and will need scaffolding from instructors on how to meaningfully apply learning to new

contexts. Student-centered learning does not, then, assume that students are ready to fully take control of the classroom, but instead puts in place support structures to allow students to "make sense of content, make informed decisions, monitor their progress, and adapt to emergent challenges" (Lee & Hannfin, 2016, p.719). The student is simply called upon to be an active participant in his/her own learning experience and to engage in learning by becoming a member of "a shared community of practice" (Worth, 2014, p. 361) rather than a recipient of knowledge transfer.

Classroom environment. Student-centered classrooms are flexible in both time and space in order to allow students to have control over their learning process. Ideal environments for student-centered learning are comprised of multiple small collaborative group work areas and a larger, whole group area for presentation. Although most schools were not constructed with the principles of student-centered learning in mind, it is possible to apply some of the concepts to traditional classrooms in order to advance the goal of creating a flexible classroom environment. Teachers can create classrooms that provide for small group learning spaces and can also allow students access to whole group presentation areas. Student-centered classrooms may also make use of space outside the classroom walls, such as hallways or larger rooms within the school (Meeks, 2014). Student-centered environments also allow flexibility with time, allowing students to pace themselves and self-evaluate for readiness to move onto the next learning objective under the guidance of teachers. Classroom environments should make meaningful use of available technology, recognizing that students need exposure to technology use in order to be successful in today's information-rich world (Tarbutton, 2018). Technology has automated many routine tasks and processes in the workforce, and companies need workers who "can adapt and contribute…with the communication, problem-solving, and critical thinking skills that enable

them to customize their work and respond to organizational expectations" (Kay, 2010, p. xvii). In short, the technological revolution has shifted the demands on today's workers, and schools must prepare students with the skills to successfully use technology to meet the changing demands of the workforce in order to succeed beyond the classroom.

Gaps in Literature

As Aguilar (2013) pointed out, most districts have no formal training program for coaches. Coaches are often individuals who were strong classroom teachers, but "many more skills and capacities are required for working with adults" (Aguilar, 2013, p. 10). Therefore, there is a need to develop supports for new coaches to acquire these skills as well. Although the goal of coaching is to guide the collaborating teacher to a transformational learning experience, Sammut (2014) identified a lack of research confirming this correlation. This study will seek to determine if supported coaching can work to transform teaching practice to a more student-centered environment.

Vermunt (2014) highlighted the fact that "studies on teachers' views of their own learning are rare" (p. 89). This study will investigate the experiences and reflections of both coaches-in-training and collaborating teachers as they engage in professional learning. Additionally, this study attempts to provide a measure for teacher learning through reflections and observation tools, addressing the "urgent need to develop and research diagnostic instruments for measuring the various elements of teacher learning" (Vermunt, 2014, p. 93). Additionally, Desimone & Pak (2017) contended that while coaching is "consistent with research-based ideas of effective professional development… more empirical investigations need to be conducted… to firmly establish coaching as a valuable PD opportunity for teachers" (p. 8). This study seeks to add to the literature affirming this connection.

Research about effective coaching principles is abundant across the disciplines of sales, sports, business, leadership, and education. However, research regarding "coachability" is less readily available. Cuichta, Letwin, Stevenson, McMahon, and Huvaj (2017) identified open-mindedness and receptivity to feedback as common characteristics of coachable athletes, salesmen, and entrepreneurs. The authors defined the concept of coachability in business as "the degree to which an entrepreneur seeks, carefully considers, and integrates feedback to improve his or her venture's performance" (p. 861). In athletics, coachability was found by Giacobbi (2001) to be a measure of an athlete's willingness to learn new concepts and to refine existing skills with feedback from a coach, depending also on the level of trust the athlete had for the coach (as cited in Cuichta *et al.*, 2017). Coachability in sales was found to be measured by similar characteristics.

The question, then, becomes: What do these characteristics look like in a coachable educator? Research on this topic is exceedingly scarce, suggesting that current educational structures may be pouring time and resources into less than coachable teachers as no such definition of *coachable* currently exists. Sprankles and Backman (2017) equate the concept of coachable educator to that of an educator who possesses a growth mindset and who believes that performance can be improved through hard work. They, too, cite openness to feedback and trust in a coaching relationship (in this case, with school administration) as determining factors for success in the field. However, research detailing the cultivation of such educators is severely lacking.

Just as students must be prepared to meet uncertain futures, armed with critical thinking and problem-solving skills, so, too must the educators of today. In the shifting pedagogical landscape, schools must cultivate flexible, open-minded educators who can receive and use

constructive feedback to continually refine classroom practice. This study aims to add to the literature on coaching by examining the characteristics of coachability in both the collaborating teachers and in the coaches themselves.

Summary

Today's changing educational landscape requires a shift in role for both students and teachers. Students must become actively engaged in order to drive the learning process, and teachers must learn to cede some power to students in order to allow for this shift. To aid in this change, professional development efforts must meet teachers where they are and help them to see the value in changing traditional teaching practices. Coaching can be an effective way to navigate this shift, but coaches also need support as they take on new roles within the field of education. This study seeks to examine ways to provide job-embedded support to coaches-in-training in order to inform coaching development programs that will positively impact teaching practices.

CHAPTER 3: METHODOLOGY

Purpose

The purpose of this study was to provide a more formalized, reflective structure for developing teachers as peer coaches. While coaching has the potential to transform teaching, schools thus far are "yet to tap into its potential as a vehicle for effective learning" (Griffiths, 2015, p. 17). Since coaching involves peer collaboration in a reflective action cycle, this method of professional learning can lead to transformational changes in practice through a "slow, cumulative yet strong process of change" (Hoggan, Malkki, & Finnegan, 2016, p. 52). With its potential to transform teaching practices, coaching in the educational context needs a more formal definition and training process to develop effective coaching practices for teacher leaders (Burley & Pomphrey, 2011).

Transforming teaching practices impacts the school culture, and therefore this study also examined ways in which changes in teaching and learning could impact a shifting school culture in regard to the perceived values of both professional development and student-centered learning. When educational practices shift, educators "have the potential to radically transform schools" (Aguilar, 2012, p. 5). Transforming a school culture is the ultimate goal of the coaching process (Fullan, 2016). Coaching, while transforming one classroom at a time, seeks ultimately to contribute to efforts to "reform, save, or transform public education" (Aguilar, 2012, p. 5). Therefore, the long-term impact of this study was to add to the body of knowledge on school reform.

Research Questions

This study was designed to answer the following research questions:

1. How do teachers perceive themselves as coaches in a peer-coaching relationship?
2. What are teachers' perceptions of coaching as a professional development strategy?

Research Design

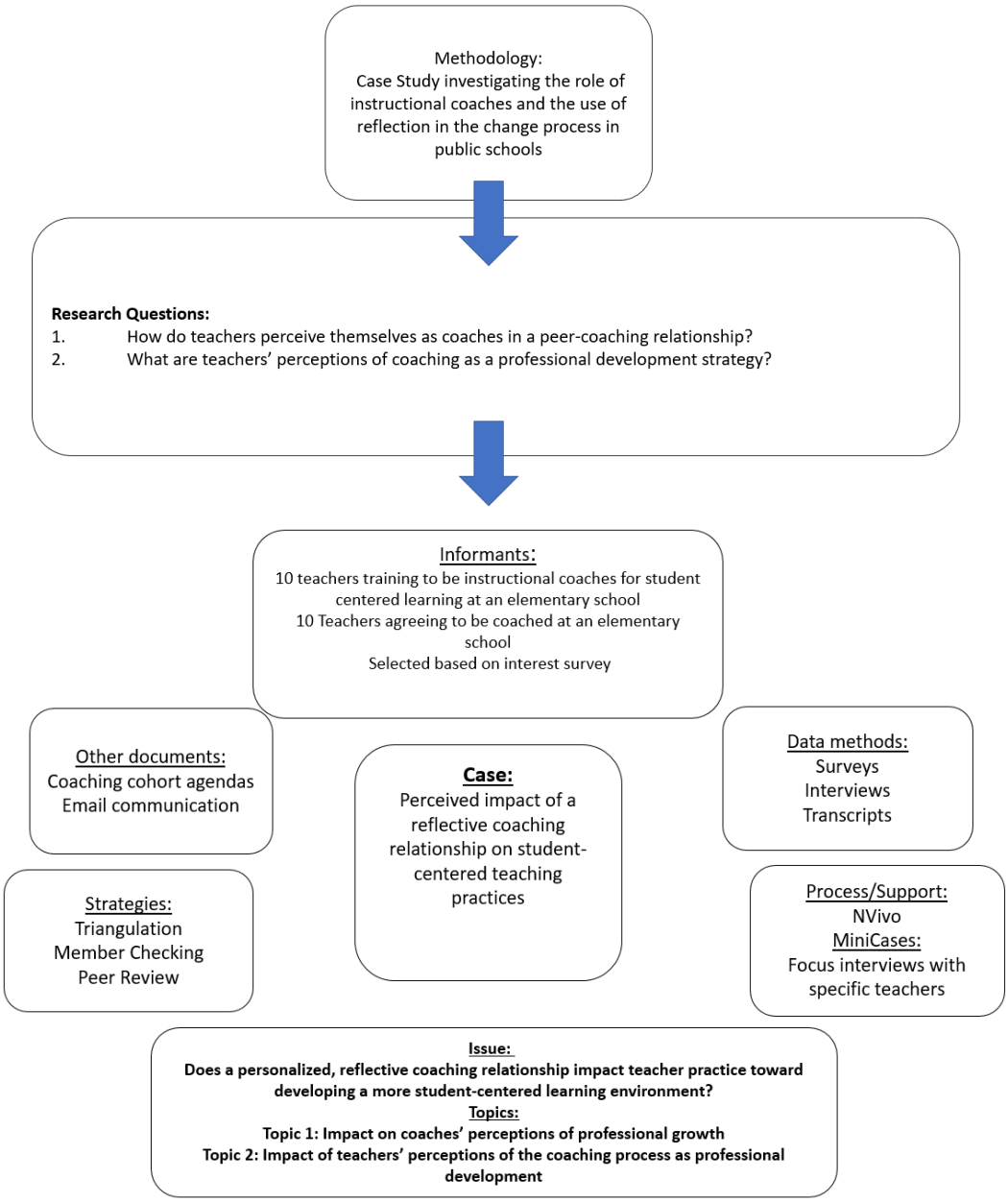

Figure 3. Research design

A mixed method case study research design allowed for investigation of teacher growth in a peer coaching relationship. A case study design fit the purpose of this study as it allowed for the use of a mixture of qualitative and quantitative data points to fully explore the impacts of reflection on teachers' perceptions of growth. The study also explored factors that impacted teacher perception of coaching as a form of professional development. The case study design provided a structure for in-depth exploration of individual actions and responses in a real-world environment (Creswell, 2013). This case study investigated the bounded system of a peer coaching relationship, and the data collection provided for rich description of the coaching relationship and the ways in which the participants made meaning of coaching interactions (Yazan & De Vasconcelos, 2015).

The study investigated how participants made meaning of coaching and reflection experiences as they constructed knowledge as a result of participation in the case. A case study worked well for this research focus as it allowed a broad view of the case in question and allowed the changes in the participants' practices to be tracked over time. The broad view of the case followed multiple viewpoints of participants during the course of the study, and the changes in participants were analyzed using periodic interviews and pre- and post-survey data. A case study design was appropriate as the aim of this study was to investigate "a real-life phenomenon in-depth and within its environmental context" (Ridder, 2017, p. 282). This case study examined the bounded system of a cohort of instructional coaches and the collaborating teachers who were coached. A bounded system can be a program or collection of people to be studied, delimitated by specific boundaries regarding what is considered part of the case in question.

This case study focused on the members involved in the coaching relationship (Stake, 1978). A case study places the researcher as in a position to gather participant interpretations,

requiring the researcher to make meaning of data in order to understand the constructed reality of participants (Yazan, 2015). Similarly, Merriam's (1998) interpretation of the case study design emphasized the participants' experiences and the ways in which participants understand and make sense of these experiences as key interests of the qualitative researcher when conducting a case study. This study examined the experiences and interpretations of instructional coaches as they implemented reflective practices with collaborating teachers to work toward implementation of new teaching methods. The aim of the study was to gain a better understanding of effective strategies for training instructional coaches using reflective practice and to determine the impacts of coaching on moving teacher practice to more student-centered learning environments.

This study was based on a constructivist view that reality is socially constructed and situated within a particular context and culture (Antlová, Chudý, Buchtová, & Kučerová, 2015). The research design attempted to understand the complexities of the participants' experiences from their viewpoints during the process (Mertens, 2010). As a constructivist researcher, the goal was to understand the ways in which the participants constructed their own realities of the professional learning experience. As such, the research design to evolved and changed throughout the study (Mertens, 2010). Adults bring a variety of experiences to the learning process, and current views help adult learners construct meaning in new learning (Cox, 2015). I investigated the best ways to support professional learning to ensure that implementation was purposeful and ongoing. The goal was to create an instrumental case study which would yield results that could be generalized to other scenarios (Stake, n.d.).

Mezirow's (1997) Transformative Learning Theory informed this research design. Transformative Learning Theory requires learners to challenge existing beliefs through engaging in and reflecting on new experiences (Strange & Gibson, 2017). Through transformative

learning, current realities are challenged and ultimately changed, or transformed, due to the learning experience. Transformative learning requires learners to think deeply and to reflect critically on experiences in order to shift current mindsets (John, 2016). Due to its emphasis on critical reflection, active learning, and meaningful collaboration, Transformative Learning Theory was a foundation of this study (Griffiths, 2015).

Setting and Access to Site

This study was conducted at Donnelly Elementary School (a pseudonym) where the researcher is currently employed. Donnelly Elementary School is located in a suburb of a large city in the southeastern United States and serves around 800 students in grades K-5. This study was conducted with members of the school's Technology Leadership Team and teachers volunteering to work with team members on coaching practices. The researcher is a member of the Technology Leadership Team and had access to team meetings. This study took place during the 2018-19 school year.

Local Context

Donnelly Elementary School will be used as a pseudonym to protect the privacy of participants in this study. The school's population is around 800 students in grades K-5. Of these, 53% are Caucasian, 25% are Asian-American, 9% are African American, 8% are Latinx, and 5% identify as Multiracial. Fewer than 15% of Donnelly students are considered economically disadvantaged. The population of English Language Learners is also small at only 9%. The percentage of Donnelly students receiving special education services is 7%. Additionally, Donnelly has around 50 teachers on staff, the majority of which are female (90%). The staff is 87% Caucasian, 9% African American, and 1% Hispanic. Donnelly has an active

Technology Leadership Team (TLT). The members of this team served as the population for this coaching study.

Donnelly is a traditionally high-achieving school, with test scores above the state and county averages on the state's standardized test. On the 2018 state assessment, the percentage of students in grades 3-5 scoring proficient or higher exceeded the percentages for both the county and state, as seen in the tables below:

	Donnelly ES	County	State
Distinguished	41	14	9
Proficient	39	34	31
Developing	15	30	34
Beginning	5	23	26

Table 3. Percentages of Students Scores on ELA state assessment in 2018

	Donnelly ES	County	State
Distinguished	37	17	12
Proficient	44	30	30
Developing	16	34	39
Beginning	3	20	20

Table 4. Percentages of Students Scores on Math state assessment in 2018

However, the state is implementing a student growth model aimed at examining not only achievement numbers but also student growth relative to similar peers. Student growth data for Donnelly revealed target groups in need of strategies to ensure higher student growth on state assessments. Additionally, disaggregated data also revealed sub-groups where achievement levels are a target area for concern as well.

	Achievement (% proficient or higher) in grades 4 and 5	Growth percentile in grades 4 and 5
White	76	50
African American	72	62
Asian	92	62
Hispanic	72	61

Table 5. 2018 state assessment results disaggregated by ethnicity

Table 4 suggests that Asian students surpassed their peers in achievement on state assessments in both 4th and 5th grades. However, growth data told an interesting story. In both 4th and 5th grades, white students showed the lowest growth among subgroups, with similar growth occurring among the other three reported ethnic groups.

	Achievement (% proficient or higher) in grades 4 and 5	Growth percentile in grades 4 and 5
Economically disadvantaged	55	54
Not economically disadvantaged	84	56
Students with disabilities	31	25
Students without disabilities	83	56
English Language Learners (ELLs)	17	38
Non-ELLs	81	56

Table 6. 2018 state assessment results disaggregated by student

Disaggregating data by student population also showed areas in need of improvement for Donnelly. Economically disadvantaged students, students with disabilities, and English Language Learners struggled to achieve at the higher levels of their peers. In reviewing data for economically disadvantaged students, growth was relatively the same while achievement was far below. This data suggests that educators need strategies to promote growth among economically disadvantaged students at a higher rate in order to remediate gaps and help them achieve at the high levels of their peers. Students with disabilities displayed both achievement and growth scores far below their non-disabled peers, as did English Language Learners. Both of these subgroups show a need for reevaluating current teaching practices in order to reach all students.

As Modrek & Kuhn (2016) highlighted, however, achievement data is not indicative of actual learning, only of memorization and recall. Donnelly teachers are faced with the competing pressures of maintaining high achievement scores and of reaching all students to ensure true learning takes place. Emphasis on growth over achievement is intended to shift the

focus to a measure of student learning over time rather than a single indicator of academic performance, but this growth measure is still only reported annually on the state assessment. To truly evaluate learning over time and reach all student populations, Donnelly is working to implement a more student-centered learning model into daily teaching practices.

Donnelly is in its fourth year of working to implement principles of student-centered learning. The student-centered learning framework identifies the following seven principles as key to this movement: choice for demonstrating learning, student choice and voice, varied instructional strategies, flexible pacing, just-in-time direct instruction, co-planning learning, and mastery-based assessment. Staff are familiar with the principles of student-centered learning and have been working to shift instructional practices, focusing mainly on student choice and voice, varied instructional strategies, and student choice in demonstrating learning. Some staff members have made significant shifts in practice.

Staff members already implementing personalized learning principles represent the first two categories of Rogers' *Diffusion of Innovations* model, the "innovators" and the "early adopters" (Yuskel, 2015, p. 510). These teachers are comfortable with the teaching practices required and the technological components of teaching that can enhance this teaching method. Others seek guidance and support in this process through the peer coaching arrangement, representing Rogers' "early majority" (Yuskel, 2015, p. 510). These staff members have seen the success of their peers and are open to trying implementation with support. Some staff members have not yet chosen to engage with the change, representing the "late majority" and the "laggards" (Yuskel, 2015, p. 510). These staff members may not yet see the value or may not yet feel they have the resources to be successful are waiting to see the experiences of peers. The

current need is to strengthen instructional practices of those who need evidence that the change is desirable so that the shift in practice becomes widely accepted.

Participants

The participants were ten technology teacher leaders who served as instructional peer coaches at Donnelly Elementary School. Additionally, data was collected from the ten Donnelly teachers being coached.

The Technology Leadership Team (TLT) worked to build capacity at the school level by training leaders in student-centered learning and technology integration. The participants were selected through criterion sampling because they met the criteria of membership in the Technology Leadership Team at Donnelly ES. Members of the Technology Leadership Team applied for the voluntary position of student-centered learning and instructional technology leader at the school. Through the application process, the teachers demonstrated effective use of instructional technology and implementation of student-centered learning and expressed a passion for helping other teachers do the same. These characteristics were critical to serve as peer mentors to others seeking to grow professionally. Therefore, criterion sampling was used to select these participants, as they had a willingness to participate in a coaching relationship and were comfortable with instructional technology use and with implementation of student-centered learning, all of which were key aspects of this study.

The teachers agreeing to be coached were selected through stakeholder sampling. A survey was distributed to the whole staff to determine current levels of student-centered learning implementation and willingness to participate in a coaching relationship. Asking for volunteers to engage in this experience represented a respect for teacher voice in the professional development process and embodied Jim Knight's (2007) partnership philosophy in which

"instructional coaches see themselves as equal, respect others' choices, and encourage others to voice opinions" (p. 40). These teacher peers were the recipients of the coaching experience and were therefore the most affected by the experience. Their participation was linked with their engagement in the coaching experience.

Process

The school-based Technology Leadership Team is modeled off a similar county level team designed to provide support for the implementation of student-centered learning and the meaningful integration of technology. Donnelly has four members on the county Technology Leadership Team who work as the leadership team for the school-based group. The Donnelly TLT was established three years ago. The original school-based members were selected by the leadership team based on their level of comfort with instructional technology integration. A member was selected at every grade level, K-5. These members were approached and asked to form the inaugural school team. Since that time the team has become a leadership group at the school and membership is determined through an application process. Some grade levels have multiple representatives.

Each member of the TLT is expected to engage in peer coaching. The team has evolved over the years to determine the most effective way of impacting practice at the school level. The original coaching design asked TLT members to identify and work with a resistant staff member in order to have a positive impact on shifting his or her practice. This method was less successful than anticipated due to resistance from the partnering teachers. The TLT then attempted to have each grade level member coach his or her entire teaching team. This method was less successful than anticipated because some team members were resistant, and the coaching relationship sometimes created a power struggle between the coach and the grade level

chair. Coaches also felt that they had too many collaborating teachers to effectively reach each person's needs. Some collaborating teachers had positive experiences while others resisted the help. Coaches also expressed frustration that they could never work in the classroom alongside team members due to the common planning time for teams.

Based on this history, this study was designed to partner TLT members with collaborating teachers who expressed interest in the coaching relationship and who were not members of the peer coach's grade level. This was designed to give peer coaches a chance to use their planning time to observe their collaborating teacher in action and to allow collaborating teachers to have an opportunity to observe their peer coaches as well. Off grade level pairings were intended to prevent conflicts with grade level leaders. A survey was distributed to all staff detailing the coaching goals of the team and the purpose of the coaching work. More than 20 staff members expressed interest in taking part in the coaching relationship. Each of these teachers was contacted for follow-up. Ultimately, 10 teachers agreed to participate in the partnership and study. The TLT leadership team worked to match TLT members with collaborating teachers based on a number of factors such as teacher personalities, coaching experience, and teaching background. TLT members were then asked to provide input on the pairings. After all members were successfully partnered, the TLT leadership team contacted the collaborating teachers to introduce their peer coach.

The TLT held five school-based meetings from September through March to complete professional development sessions on coaching, change theory, and adult learning principles and to reflect on coaching implementation. These sessions were designed to coach the TLT members in best practices when working with adults. The sessions were a combination of instruction in adult learning needs and development of coaching capacity for the TLT members as they refined

their coaching abilities with others. Many TLT members attended one county professional development day during this time as well. The TLT timeline is outlined in Table 7:

September 2018	Introduction to coaching protocols and tools
October 2018	Goal setting, creating a partnership, reflective action cycle
November 2018	Examining how adults learn Group focus interview
December 2018	Individual reflection conferences with researcher
January 2019	Individual reflection conferences with researcher, county training session
February 2019	Useful resources to help with coaching (grab and go!) Group focus interview
March 2019	Active listening principles and practice Group focus interview

Table 7: TLT Timeline

The members of the TLT were proven classroom teachers but needed guidance to effectively coach peers. "Trust defines a coaching relationship" (Aguilar, 2013, p.40), and developing a trust relationship takes time. TLT members had to navigate not only their own busy teaching schedules, but also those of the collaborating teachers in order to make time to truly form a connection. This was a challenge for the coaches and collaborating teachers, and potential solutions were discussed and shared during monthly sessions. Additionally, research states that coaches need to "listen more than they tell" (Knight, 2007, p. 25). The members of the TLT are knowledgeable teachers who are often asked to present staff development sessions, lead teams, and assist teammates with strategies. In those roles, they have been asked to be the problem-solvers and deliverers of information. The coaching role required them to let the collaborating teacher drive the experience, and this proved difficult for some. To counteract this, protocols were provided for conferencing with teachers and work sessions at monthly meetings provided reflection time on coaching performance.

Members were provided with a monthly coaching goal and used the information learned in professional development to drive the coaching relationship with a peer. The coach-in-

training and the collaborating teacher had a pre-observation conference and a post-observation conference. The coach observed the collaborating teacher's classroom approximately once a month. After coaches met with collaborating teachers, coaches then held reflection conversations with the researcher. Group focus interviews took place three times throughout the study, as noted in Table 7. These interviews took place after school and lasted between 20 and 30 minutes. The open-ended questions from Appendix G were used to begin the interview and the conversation was driven by the participants.

I followed the Institutional Review Board (IRB) processes for research involving human subjects. I obtained signed informed consent forms from all participants, stating the purpose of the research, the time required, and the perceived risks and benefits. Participants were informed of methods undertaken to ensure confidentiality, including using pseudonyms and removing identifying information for all participants. Additionally, participants were informed of their ability to refuse to participate in certain aspects of the study or to withdraw from the study at any time.

Value of Methodology

A mixed method design allows the researcher to use the strengths of both qualitative and quantitative research to provide a comprehensive understanding of the topic of interest. Quantitative data was used for numerical evidence of teacher growth, and qualitative data provided an insight into the context of that growth. This research used a concurrent model for collecting both qualitative and quantitative data. A concurrent design allows the researcher to collect data simultaneously in order to combine the results to form a more complete picture of the phenomenon. The concurrent design does not place emphasis on one type of data over another; rather, it allows the researcher to combine information in order to "find corroborating

evidence and to produce a more complete understanding of the research problem" (Clark & Ivankova, p. 120). My research collected survey data and interview data in an attempt to provide an authentic view of the participants' experiences.

Using both qualitative and quantitative methods provided triangulation for data collection. Triangulation allows the researcher to "obtain more valid conclusions about a phenomenon by directly comparing the results obtained from qualitative methods to those obtained from quantitative methods" (Clark & Ivankova, 2016, p. 84) in order to identify patterns in data. Triangulation allows the researcher to compare results from various types of data in order to provide a higher level of validity to the results. The mixed method design also allows for a holistic view of the participants' experience in the research process, with multiple methods of data collection resulting in a more "complete and multifaceted understanding" (Clark & Ivankova, 2016, p. 85) of the topic. Triangulation of data occurred through the use of focus groups and also individual interviews to obtain a complete picture of the process. Coach and collaborating teacher conversations were recorded when possible and compared to interview transcription data obtained from both sets of participants. Supporting documents such as coaching tools used and emails exchanged were also collected for analysis. Individual viewpoints from those involved in the coaching relationship were examined to provide a rich picture of participants (Shenton, 2004).

Instrumentation and Data Collection Procedures

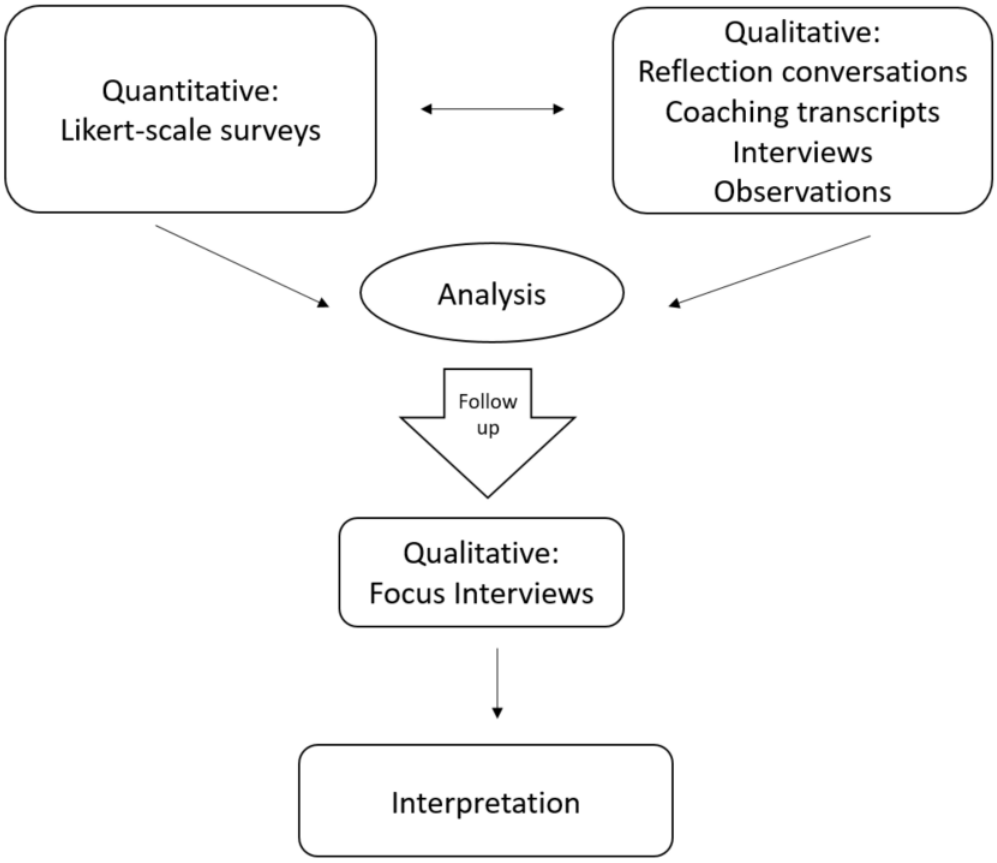

Figure 4. Data collection methods

Qualitative Data Collection

Qualitative data was collected through interviews, observations, coaching transcripts, and observations throughout the study. Coaches and collaborating teachers were interviewed individually or in groups as deemed appropriate throughout the study. Individual interviews used open-ended questions to allow for participant voice as seen in the anticipated question set found in Appendices F and G. While the interviews were guided by topics developed by the researcher, the open-ended structure allowed for "digressions… probes, and follow-up questions based on the responses" (Hatch, 2002, p.95). Informal group interviews and observations also

informed the research process. In informal interviews, research participants were able to have conversations around the coaching process, and these conversations were not guided by a formal questioning protocol. These interviews took place at monthly TLT meeting sessions.

Coaches collected audio recording of coaching sessions when possible. Coaching sessions included a pre-observation goal setting conference (see Appendix E) and a post observation follow-up conference (see Appendix F) using provided protocols. The researcher and coach discussed the coaching interaction and the coach analyzed implementation of principles learned, focusing on the reflection questions found in Appendix G. Audio recordings were transcribed for further analysis. Both coaches and collaborating teachers were asked to engage in one focus interview to assess existing attitudes and professional values and to evaluate shifts in perception as a result of the coaching experience (see Appendix H). Thirteen participants completed the focus interview process.

Quantitative Data Collection

Coaches completed a Likert-scale self-assessment at the beginning and end of the coaching training. This survey was based on the Competent Coach rubrics developed by Insight Education Group (2017) (See Appendices A and B). The pre-survey allowed coaches to self-evaluate coaching readiness and level of coaching skills. The post-survey evaluated the same concepts, allowing for a clear picture of coaching growth throughout the experience. Collaborating teachers also completed a pre-survey on views of professional development and a post-assessment of the coaching experience based on the Insight Education Group (2017) Stakeholder survey (see Appendices C and D).

The Competent Coach rubrics for both coaches and collaborating teachers assessed the categories of credibility, listening, objectivity, and communication. On these instruments, these terms are defined as follows:

Credibility

Coaches should have applicable, relevant classroom experience. Coaches should be knowledgeable about best practices because they stay current with research trends and engage in professional development activities. Coaches should be able to anticipate outcomes in the classroom (Insight Education Group, 2017).

Listening

Coaches can solicit information and help teachers make sense of their realities. Coaches can validate teacher perspective but also challenge examination of practice (Insight Education Group, 2017).

Objectivity

Coaches have the ability to act and respond without judgment or critique, maintaining a balanced perspective in the coaching relationship (Insight Education Group, 2017).

Communication

Coaches provide a non-threatening environment in which reflection is fostered. Coaches are able to accurately discuss classroom reality and are open to feedback (Insight Education Group, 2017).

Data Analysis Procedures

Interview responses and reflection entries were coded to examine attitudes toward professional development, implementation levels of student-centered learning, and the types of reflection in which teachers engaged during the course. Group interview content, focus

interview content, and coaching conversations between participants were transcribed and coded. Open coding was used to identify categories for further exploration and summaries of responses will be used to help organize the data. Participant behaviors, strategies, states, relationships, and conditions were examined (Allen, 2017). Behaviors referred to the actions that participants took during the course of the coaching relationship. Strategy codes examined coaching and teaching practices of the participants. The mental and emotional states of the participants were coded. Aspects of coaching relationships, both positive and negative, were identified, and conditions of the relationship were examined to identify what constraints existed within the coaching framework (Allen, 2017). These coding methods allowed qualitative data to be categorized (Moser & Korstjens, 2018). Data was coded using a hierarchical system to divide topics into categories, and axial coding was implemented to determine connections between the categories and to examine the relationship between actions and attitudes of participants (Allen, 2017).

All data was entered into Nvivo and coded through this program. Documents were loaded into Nvivo and codes called nodes were established. Each transcript was read multiple times, and content pertaining to each node was highlighted and tagged with that category. For example, all data dealing with relevance of classroom experience was coded under the node *Credibility*. All excerpts in this category were then reread multiple times to determine sub strands for credibility. This quote from Bethany was tagged with the *Credibility* node: “It’s hard to come up with a project type thing, not hard, but for [younger student] it’s different to come up with a project based something, especially in math because they aren’t going to be trying you know like [an older student] coming up with area and perimeter of playground or something like that...” (reflection conversation). This quote from Tasha was also tagged with the *Credibility* node: “At the beginning I was totally lost, like this is a lot of responsibility how am I supposed to

coach somebody who has a bunch of experience, so I was intimidated by the title coach, but now I understand that's it's not necessarily like she is more experienced than me so I was worried, but I feel much more comfortable with it now and know that it's just trying new things and I have learned a lot from her too" (focus interview). I compared the two quotes to determine the difference in concept being described and determined that Bethany's quote showed *Doubt in Ability*, or the doubt that her skill set was applicable and relevant to the coaching relationship. Tasha's quote, however, showed *Self-Doubt*, or a doubt that she was confident enough in herself to be a successful peer coach. In order to analyze the quantitative data, pre- and post-survey scores were compared to determine if coaching ability and teacher perception were impacted through the research process. Excel was used for analysis of this data.

Validity of Interpretation

To ensure validity, the instruments used in the study were developed from research-based sources. Quantitative coaching assessments were based on the work of the Insight Education Group (2017). Qualitative instruments were based on the work of Jim Knight (2019). To ensure credibility, Shenton (2004) suggested the researcher be familiar with the research context prior to data collection. As a member of the faculty, I had a familiarity with the context and a "relationship of trust" (p. 65) with all parties involved in the process. Survey reliability was based on inter-item correlations. Each survey contained a number of items measuring the same construct, and those results were compared by obtaining a mean score for each construct (Phillips, Aaron, & Phillips, 2013).

Throughout the research process, informants were assured of the ability to refuse to participate in any part of the study and were advised of measures to ensure confidentiality in data collection. Because I am also a member of the school faculty, I continually reminded

participants of my status as an independent researcher during this process to avoid any conflicts of interest. Data was open to review by members of the research study. Member checks were used during interviews to ensure participant voice was captured with accuracy. The process has been detailed using rich, thick description to provide for transfer to other settings (Shenton, 2004).

Limitations and Delimitations

Potential limitations of this study include a small sample size and the dependence on participants to provide honest and open feedback during interview sessions. Because this study is specific to the researcher's site, results may be difficult to replicate at other locations. To combat this, research-based instruments were used, and methods were described with as much detail as possible to assist in replication of the study. This study was also time-bound, taking place during the 2018-19 school year.

My role at Donnelly Elementary School is a teacher support role, and therefore I serve as a bridge between the teaching staff and the administration team. Because of this positionality, it is possible that some teachers may have been hesitant to fully disclose all details of the coaching relationship in our conversations. However, as a seasoned member of the school staff, I have developed trusting relationships with staff in which honesty is encouraged and fostered. Developing this type of trust relationship takes time, which would be a limitation when attempting to replicate this study.

Ethical Considerations

Participant privacy and confidentiality were protected throughout the study. The school name (Donnelly Elementary) is a pseudonym. Pseudonyms were also used for all research participants. This study was approved by the Institutional Review Board (IRB) at Kennesaw

State University and by the school system in which the research took place. Participants all signed consent forms and were advised of their right to opt out of the study at any time.

Online survey data was collected using a Kennesaw State University Qualtrics account. The anonymize response option was selected to ensure that IP addresses and location information were not collected with survey data. Video, audio, and word document data was stored on a password protected encrypted USB drive (Kingston Digital 4GB Data Traveler AES Encrypted Vault Privacy 256Bit 3.0). Hard copy documents and the USB drive are stored in a locked filing cabinet at the school and will be destroyed after three years.

Summary

The purpose of this study was to gain a deep understanding of the peer coaching relationship through in-depth exploration into the experiences of participants. Quantitative data provided a measure of change over time, while qualitative data allowed for exploration of the changes in practice during the coaching relationship. Participants worked to implement student-centered learning practices in partnership and reflected on the coaching relationship in order to provide insight that can be used to strengthen supports for instructional coaches.

CHAPTER 4: FINDINGS

The aim of this case study was to identify factors impacting teacher perceptions of coaching as an effective form of professional development and to develop a more formalized structure for training instructional coaches. Survey data was used to measure coaches' perceptions of growth through the coaching experience. Survey data was also used to determine collaborating teacher perception of coaching as an effective form of professional development. Structured interviews were used to obtain a deeper look at factors contributing to survey responses. This chapter will be organized by research question, with survey results and participant responses used to inform analysis. Research question one will examine the themes of *credibility, listening, objectivity,* and *communication* regarding coaches' perceptions of growth. Research question two will examine the themes of *credibility, listening, objectivity, communication,* and *overall impact* based on the perceptions of the collaborating teachers involved in this study. Following this analysis, the overarching themes of *need for connection* and *time as the ultimate factor* will be discussed.

This study investigated the peer coaching relationship of 10 coaches and 10 collaborating teachers. Participation is outlined in the chart below, using pseudonyms for all participants:

Participant Pseudonym	Role in the study	Contributions to the data
Vanessa	Coach	• Focus group interviews • Coaching audio recordings • Survey responses • Individual focus interview • Reflection conversation
Bethany	Coach	• Focus group interviews • Coaching audio recordings • Survey responses • Individual focus interview
Breanna	Coach	• Focus group interviews • Survey responses • Individual focus interview

		• Reflection conversation
Connie	Coach	• Focus group interviews • Coaching audio recordings • Survey responses • Individual focus interview • Reflection conversation
Lacey	Coach	• Focus group interviews • Coaching audio recordings • Survey responses • Reflection conversation
Holly	Coach	• Focus group interviews • Coaching audio recordings • Survey responses • Individual focus interview • Reflection conversation
Tasha	Coach	• Focus group interviews • Coaching audio recordings • Survey responses • Individual focus interview • Reflection conversation
Amelia	Coach	• Focus group interviews • Survey responses
Catherine	Coach	• Focus group interviews
Mia	Coach	• Survey responses • Focus group interviews
Helena	Collaborating teacher	• Survey responses
Joanna	Collaborating teacher	• Survey responses • Coaching audio recordings • Individual focus interview
Diane	Collaborating teacher	• Survey responses • Coaching audio recordings • Individual focus interview
Liz	Collaborating teacher	• Survey responses • Coaching audio recordings • Individual focus interview
Janine	Collaborating teacher	• Survey responses • Coaching audio recordings • Individual focus interview
Toni	Collaborating teacher	• Survey responses • Coaching audio recordings • Individual focus interview
Shay	Collaborating teacher	• Survey responses • Coaching audio recordings

		• Individual focus interview
Eleanor	Collaborating teacher	• Survey responses • Coaching audio recordings • Individual focus interview
Priscilla	Collaborating teacher	• Survey responses
Virginia	Collaborating teacher	• Survey responses

Table 8. Participation

Coaches in this study have between 3-17 years of teaching experience. Collaborating teachers' experience ranged from 2 years of experience to over 30 years. Specific identifying information regarding each individual teacher's level of experience will be withheld to protect confidentiality. It is important to note that Connie coached two collaborating teachers while Catherine's partner teacher did not participate in this study. Catherine attended focus interviews but did not contribute transcript logs. Not every coach completed the survey, although the opportunity was given multiple times to all participants through an anonymous distribution link. Some participants confirmed completion of the survey although this information was not required or solicited. Collaborating teacher participation was largely dependent upon the investment of the coach.

The Technology Leadership Team (TLT) held full group meetings during the months of September, October, November, February, and March. November, February, and March meetings included focus group interviews with all members. During December and January, each member held one individual reflection session with the researcher to discuss individualized needs in the coaching experience. Focus interviews for coaches and collaborating teachers were scheduled during the month of February.

Data Analysis Procedures

Coaching survey data was collected and analyzed in the categories of *credibility*, *listening*, *objectivity*, and *communication* as designated by the original survey instrument. Each theme was further analyzed to determine subthemes. Collaborating teacher survey data was collected and analyzed in the categories of *credibility*, *listening*, *objectivity*, *communication*, and *overall impact* as designated by the original survey instrument. These themes were also further broken down into subthemes. Seven of the ten coaches completed the original self-evaluation, and eight coaches completed the post-study survey. All responses within a category were tallied to provide a percentage for each indicator. Nine collaborating teachers completed the professional development pre-survey and ten completed the post-survey on the coaching relationship. The same process was used to analyze those results. Recordings of focus sessions, reflection conversations, focus interviews, and coaching audio were transcribed and coded based on the defined categories. Category codes were further broken down into sub-codes to better understand the meaning of the data.

Research Question 1

Research Question 1 asked *How do teachers perceive themselves as coaches in a peer-coaching relationship?* Study participants engaged in all three of Liu's (2015) levels of reflection, with instances of technical, practical, and critical reflection occurring throughout the data. Reflection opportunities took place during group focus meetings, individual reflection conversations, and focus interviews. Coaching growth was measured on a quantitative scale using the coaching survey instrument. The comparison of results appears below:

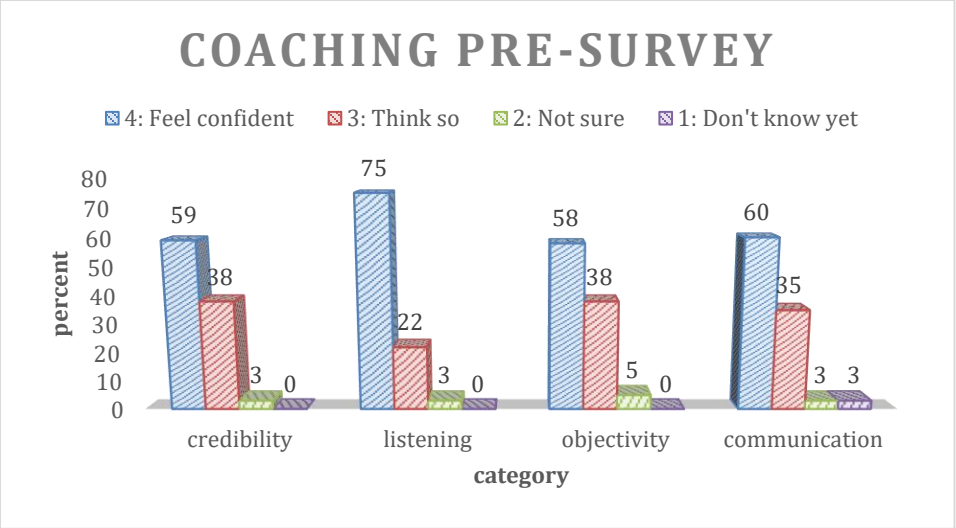

Figure 5. Pre-survey of coaching skills

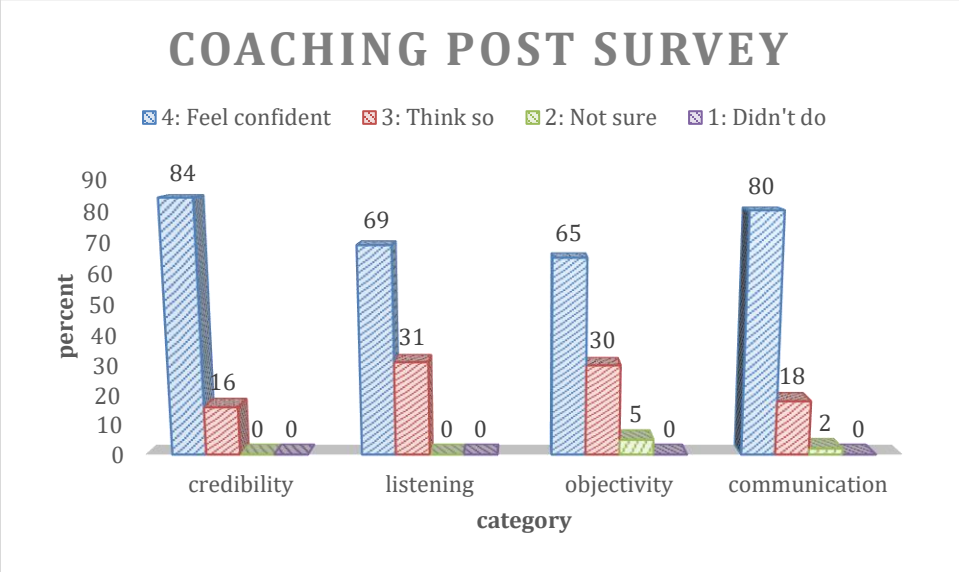

Figure 6. Post-survey of coaching skills

Results indicated that collaborative reflection on coaching practice had a slightly negative impact on perceptions of coaching ability in the area of listening but had a positive impact on perceptions of credibility, objectivity, and communication in the coaching relationship. A closer look at participant responses within each category provides insight into this finding.

Credibility

Credibility indicators assessed coaches' perceptions of their level of skill and knowledge when helping others. Survey items asked coaches to rate themselves on knowledge of instructional strategies, relevance of experience, and familiarity with teaching demands at the school. Pre-survey results showed that more than half of the participants chose "feel confident" on indicators of credibility. Post-survey results showed a large increase in coaches' perceptions of credibility.

Interviews with coaches identified that coaches experienced doubt in their practical knowledge during the coaching process. Coaches expressed concern working with teachers on other grade levels or content areas and whether they had the experience necessary to assist their collaborating teachers, coded as *Doubt in Ability*. *Doubt in Ability* is illustrated by the following interview excerpts:

Coach	Doubt in Ability
Connie, reflection conversation	I am not a content specialist in the field I feel nervous about going that direction without seeing what it is she means… so for me I 100% feel it's going to have to be something she wants to do and she sets. I could be wrong. I don't know because I don't know the answer to that one. I would have to do some digging because they seem to be doing just fine, so why mess up a good thing?
Bethany, reflection conversation	It's hard to come up with a project type thing, not hard, but for a [younger student] it's different to come up with a project based something, especially in math because they aren't going to be trying to, you know, like an [older student] coming up with area and perimeter of playground or something like that…

Table 9. Doubt in Ability

These quotes illustrate coaches' hesitancy to insert new ideas into the coaching dialogue due to unfamiliarity of grade level content demands or of student ability at a grade level other

than the one the coach taught. Connie expressed that because she was not an expert in the course content, she felt the teacher needed to take the lead on the action steps chosen for improvement. From Connie's perspective, the change suggested by the teacher was potentially unwarranted, as she did not see evidence of the teacher's concern during her observation. Bethany struggled to apply her knowledge of project design to create a task that would be applicable and interesting to students younger than the ones she regularly teaches. In a focus group meeting, Connie described her growth in credibility: "For me it was more of an instructional learning process. I sometimes have to let go. I wanted to be in the classroom and do more, but I gave her some ideas and sparked some interest and she was just making it her own, the way it's supposed to be." Connie discovered that credibility can come from collaboratively developing ideas and then letting the collaborating teacher take the lead.

Some coaches expressed doubt in a more general way than simply not knowing the content or grade level. These coaches expressed feelings of intimidation around the coaching relationship, categorized as *Self-Doubt*. Time spent in the coaching relationship seemed to ease feeling of self-doubt, as illustrated by the example quotes in Table 10.

Coach	Self-doubt
Lacey, focus interview	At first, I was nervous and unsure of myself but now I feel more confident and less nervous, just more experience that I have had in the classroom with my students and trying tech and other things like that, so I feel more confident about using and implementing things with my mentee.
Tasha, focus interview	At the beginning I was totally lost, like this is a lot of responsibility how am I supposed to coach somebody who has a bunch of experience, so I was intimidated by the title *coach*, but now I understand that it's not necessarily like she is more experienced than me so I was worried, but I feel much more comfortable with it now and know that it's just trying new things. And I have learned a lot from her too, she will share resources with me, but just like it's more casual than I thought, because I was like "This is scary and a lot of responsibility and I want to make sure I do it correctly," like she knows way more than I do and we are working together.

Table 10. Self-Doubt

These quotes indicate that some coaches initially felt overwhelmed and intimidated by the title *coach*. They felt that, as younger teachers, it would be difficult to assist a teacher who had more classroom experience. As coaches got further into the collaborative experience, they began to feel more comfortable working with their partner teachers. This comfort came from further experience with their own students and from continued positive interaction with their partner teacher.

Coaches increased feelings of credibility throughout the study. Coaches used two methods to positively impact credibility, coded as *I Try-You Try* and *We Try Together*. In instances *of I Try-You Try*, coaches tested out a strategy or method with their own students in order to perfect it before advising their collaborating teacher. In instances of *We Try Together*, coaches combined classes with their collaborating teachers in order to assist the teacher while the coach's students helped the collaborating teacher's students. Quotes to illustrate both methods appear in Table 11:

Coach	Strategies for Increasing Credibility	Example
Vanessa, focus interview	I Try-You Try	I invited her to my classroom so she could see when I post something and the things that I post and what I am asking them to do on Google classroom, so she thought ok I think I have an idea of how I can use this.
Bethany, reflection conversation	I Try-You Try	So, she sent me an idea of what she wanted them to do and I gave it to my [students] and they practiced one themselves. I mean it was really easy.
Holly, focus group meeting	We Try Together	Yeah, we just went in one to one and we all went into the classroom. Me and all of my kids. And we taught them each how to log into Google Classroom and they had a conversation with the kids and [my collaborating teacher] is amazing. She said, "Will you tell us the pros of why do you love Google Classroom?" So, they had a long time, like 15 minutes which seemed long for a discussion, about like what are all the things they love about Google classroom and they

		showed them some of their work and it was just kind of like now we understand.
Tasha, reflection conversation	We Try Together	We kind of came up with a plan of my class going to her class at least once a month to try a new tech tool and they would just buddy up and my kids would share what they know. So, we did that in December for the first time and we did it for Seesaw activities in math and they loved that. They just ate it up, and up it's pretty simple with that so I feel like they all caught on pretty quickly.

Table 11. Strategies for Increasing Credibility

These quotes indicate that coaches were able to increase feelings of credibility through the use of their own classrooms and students as examples. Coaches who implemented strategies in their own classrooms first could see the process and the potential pitfalls before advising their collaborating teachers. Coaches who combined classes were able to work one on one in the teaching moment while their partner teachers experienced a strategy or tool. Allowing for students to work together helped create buy-in from the collaborating teacher's students as well, which positively impacted the coaching relationship.

Listening

Listening indicators assessed a coach's ability to push collaborating teachers to reflect on practice and to ask questions regarding the coaching process. Pre-survey responses indicated that coaches felt mostly confident in this ability, but post-survey data showed that confidence decreased slightly during the reflective coaching experience. Transcript data indicated that participants sometimes struggled to allow for reflection from their collaborating teachers. This could take the form of *overexcitement* in which the coach's ideas overtook the teacher's thoughts. This could also take the form of *disengagement*, or the coach's struggle to encourage safe reflection. Instances of this are coded below.

Coach	Struggles with Listening	Example
Connie, focus interview	Overexcitement	I know at the beginning, in general, I'm excitable and I get an idea and I get passionate and I am like WE SHOULD DO THIS and I just go off and I sometimes wonder was that my idea or her idea? It wasn't supposed to be mine.
Holly, focus group meeting	Overexcitement	I was getting so excited that she was excited that I had to like cognitively say, take a step back and say, "Ok I'm sorry I'm speaking a mile a minute, I'm excited you are excited", but I had to realize oh wait I'm moving too fast and I said that, I said, "I'm excited you are excited."
Catherine, Tasha, and Amelia, focus interview	Disengagement	Catherine: Do you feel like your person doesn't know what to say? And then you are both just sitting there…trying to get them to think of something. Amelia: I feel like when I talked to [another teacher] it just flowed, we talked like 15 minutes and then with [my collaborating teacher] I felt like I was pulling… like I don't know what else to ask, I don't think she knows what to say. Yeah, I felt that way. Catherine: Like the teacher in the video was talking like they wanted to keep talking but sometimes that person might not want to talk or know what to say. Tasha: So, then you are fishing but then…you don't know what else to add and you don't want to lead them to something and tell them.
Connie, reflection conversation	Disengagement	I kind of feel like I went in and said, "What do you need to work on?" and they were like "Um seat time with the kids" and there was no talking about, or thought, as far as back and forth conversation, which I mean there isn't necessarily a problem with it, but it didn't feel the same as when you are talking to someone and they are really thinking about what is that thing.

Table 12. Struggles with Listening

Coaches reported awareness of overexcitement in their coaching styles, and some, like Holly, took steps to scale back the level of enthusiasm. Disengagement was harder for coaches and is evidenced in the discussion between Catherine, Tasha, and Amelia. Without confidence in the ability to ask probing and reflective questions, coaching conversations could become

uncomfortably silent. In that case, as Tasha suggested, the coach may be tempted to fill the silence by leading the teacher toward the coach's goals.

Objectivity

Objectivity survey data indicated this as the weakest skill for instructional coaches although growth was shown from the pre-survey. Just a little over half of pre-survey responses showed that coaches felt confident on objectivity indicators of listening without judgment, not projecting beliefs, encouraging and challenging their collaborating teacher, and offering both positive and constructive feedback. In post-survey data, a slight increase was shown regarding reflection on actual coaching practices. Analysis of transcript data revealed that coaches had heightened awareness of this weakness, as shown in the *objectivity awareness* excerpts below:

Coach	Objectivity Awareness
Vanessa, focus interview	I know my weakness is talking and not listening and constantly giving answers to the question instead of just questioning, documenting, and figuring out your questions, instead of saying, "OH like this," and giving the answer. I think I did a good job of that because I did continue to ask questions and jot down the answers instead of saying "OH like this", so I think I got a big understanding of what she wanted it to look like in her classroom without me thinking of what it should look like.
Connie, reflection conversation	You start learning life isn't about you, it's about them, so I have done a lot more on what is it about them and what they need and there isn't a right or wrong answer. It's what do they want and how do I help them accomplish that? And so, I have had to wrap my head around that and make that shift.
Breanna, focus interview	I am not knee jerk—AS knee jerk, and I am trying really hard to put my judgmental person in my closet so I am not making judgment calls, because everyone teaches differently and I want to make sure I am not doing a judgment in my head when I am trying to help, and so even observing another teacher was like, "Why wouldn't you do this? STOP! Just grab this!" and I have to like-- and I did-- I held back totally deadpan.

Table 13. Objectivity Awareness

These quotes display that coaches were able to recognize objectivity concerns and make attempts to correct behavior that was not consistent with an objective stance. While coaches took steps to be objective, they did not report full confidence in this ability on the survey data. Reflection conversations with coaches did reveal personal biases toward goals set by the collaborating teachers, as shown in the *personal view* codes below.

Coach	Personal view
Breanna, reflection conversation	The goal is, she wants... her problem with using a lot of technology in the classroom is that she doesn't feel like it is creative enough, and she doesn't want them sitting in front of screens. So, she her goal is to find a way to be creative AND integrate more technology. So, I thought that was a good goal.
Vanessa, focus group interview	Before it was just I want to use Google classroom, but now it is I want to have better ways to drive my instruction on a quicker scale so I think that is a really good goal.
Holly, reflection conversation	Emily: So, if you were going to meet with her again is there anything you would do differently? Holly: I probably would have just said Google classroom and let's come back to Osmo, and I probably would have said ok so let's set our goals for Google classroom. We set her class up but I would have liked to set a goal to see her use this, so that's where I think we need to go with that. Emily: So even smaller steps Holly: Yeah like we got your kids set up, let's set a second goal to see you guys using it. Emily: And then build on that? Holly: Yeah, but I think that's where we are going, but if I did it again I would be like let's keep Osmo in the background. I was just so excited she was so excited to use it all.

Table 14. Personal View

Coaches' comments indicate that their personal views do impact their perceptions of the teachers' goals, but the comments also show an attempt to allow the collaborating teacher to

drive the experience. Excitement clouded objectivity in some instances, such as Holly's excerpt in Table 14.

Communication

Coaches indicated confidence that they would be able to meet the indicators of communication as reported on pre-survey data. Communication indicators measured coaches' confidence in providing clear and specific feedback, focusing on agreed-upon outcomes, being open to receiving feedback from the collaborating teacher, and using non-threatening language. Post-survey results reported an increase in confidence in communication skills.

Communication responses fell into two category codes, *processes of communication*, referring to frequency and method, and *feedback quality*, referring to actual feedback given.

Coach	Processes of communication
Bethany, reflection conversation	Bethany: There is just so much we have to do, so meeting in person is hard. That's why email is good, we kind of email back and forth. Emily: That is definitely a big obstacle, just TIME to talk or even get your thoughts together. Bethany: And emailing is great but after so long you do need to sit and have a face to face chat, but sometimes you sit and have a face to face chat. But then you have to stop and mull it over for a few days because that's how we came up with the better idea than what we were initially thinking.
Vanessa, focus interview	I didn't do well the first go round because there was so much time between our meeting and actually going to observe or implement, she kind of figured it out on her own with just me sending her an email. I need better coaching, better goal setting, what's a real thing that if we could improve this it would make an impact on her teaching?
Holly, focus interview	I think growth comes with trial and error, so the biggest thing is after we spoke, we had our goal setting meeting and I immediately sent her an email and said I think I have an idea let me test it out this weekend and let's meet Tuesday. So, it's been a week, 2 weeks, since we met and I think that's helped me grow as a coach knowing it needs to be a quick turnaround because that's what is going to be most effective.

Table 15. Processes of Communication

Coaches realized that communication needed to be frequent and timely to sustain the coaching relationship. Email was used to bridge the gap between face to face interactions in some coaching relationships.

The *feedback quality* code was an indicator that the coach reported a struggle offering feedback that was clear and specific to the collaborating teacher's needs.

Coach	Feedback Quality
Breanna, reflection conversation	She was very nervous, "How did I do? What did you think?" and I was like, "This is great, I can't believe how well you prepared," and just bringing out the positive of everything. And I didn't want to start with suggestions or anything that would turn her off.
Connie, reflection conversation	I'm not saying I did it perfectly because I didn't. I think a lot of times I am good at giving affirmative like "YES! That's good! That's great! That's awesome! That's perfect! THAT'S GOOD!" and I get really excited about things and maybe I need a little bit more neutral supportive nodding smiling, "Yeah", but not straight "That's the best thing you've ever said!", when there might be better things out there…so I feel like that conversation is misleading like when people are sharing things and you are like "That's good, that's good", instead of just… what if I'm quiet?

Table 16. Feedback Quality

Coaches' comments reveal that they struggled to balance positive feedback with constructive feedback within the relationship. Coaches tended to overemphasize the positive aspects of the classroom observation and under-address areas of growth, possibly to the detriment of the coaching experience.

Overall Experience

Analysis of coaching interviews showed that coaches were aware of areas of weakness and did attempt to address these in their coaching exchanges. Listening and objectivity were the more difficult skills for coaches, highlighting areas for further training and practice. Coaches ultimately ranked their communication skills higher at the conclusion of the study, but also indicated struggles giving constructive feedback to peers. Time became a factor in the

relationship, negatively impacting frequency and quality of communication. Survey results indicate that the process of reflecting on these aspects of coaching practice allowed coaches to more accurately see their strengths and weaknesses when working with peers. This suggests that reflection on practice can allow coaches to personalize their goals for growth in the coaching relationship.

Research Question 2

Research Question 2 asked *What are teachers' perceptions of coaching as a professional development strategy?* To fully understand data related to this question, teacher views on professional development were examined to determine if teacher views matched researched criteria for effective professional development. All 13 focus interviews were analyzed to determine what teachers in the field consider important for professional learning. Teachers valued professional development that was aligned to their personal goals, able to be implemented in their current classrooms, and included active learning strategies, core characteristics according to Desimone et al. (2012). Teachers also mentioned structural characteristics such as organization of the learning, duration of the experience, and team participation when discussing effective professional development (Desimone et al., 2012).

As Liz stated in her focus interview, "Far and away my national board certification has been the absolute best, it's something I chose to do for me and it pertained to my classroom at that time and it was very practical for me. And I have taken more out of that than any professional development I have ever had." As Liz shows, this learning was aligned to her personal goals and was implemented in her classroom with her students. Joanna stated, "I think hands on, practical things that, just moving and talking with other people and being able to touch

certain things or being able to dig in to find out for myself, or with the team." Joanna's quote shows the value in active learning and team collaboration as important for teachers.

Desimone et al. (2012) contended that traditional workshops and conferences were less effective than nontraditional mentoring relationships or study groups, but almost all participants mentioned a conference or one-day workshop when discussing the best professional development they have attended. As Tasha stated, "I loved going to [the state technology conference] for one day. And my favorite was Tony Vincent. He came here one year, and I loved it, and I went and saw him. He has valuable things to share and he makes it look so easy. I don't know how he does it all but I'm taking notes and trying new things, but that was the best." No teachers mentioned on-going duration of the learning experience as an impacting factor when describing the best professional development they have experienced.

However, some teachers mentioned the factor of *professional rejuvenation and affirmation* of values when describing their best learning experience, a factor that was not highlighted by Desimone et al.'s (2012) research. Contributions to this theme are shown below:

Teacher	Professional Rejuvenation and Affirmation
Diane, focus interview	The conference was like how do we get every kid to be successful? And yes there are times when I have a kid at my small group table who doesn't necessarily have an IEP or a 504, but I know that they need me to clarify the instructions, and I feel like that's just being a good teacher. And sometimes teachers are like, "Well they don't have an IEP or it doesn't say I have to read the question or it doesn't say I have to restate it" but I am like you don't want them to flounder so that was what I pulled away.
Holly, focus interview	The training was a positive rejuvenation and you came back, we all came back different teachers. Even though he didn't teach about a strategy, he taught about how important we were, reminded us not even taught, reminded us how important we were as teachers and that has stood out. To hug your kids in a time where people were getting sued for hugging kids, but those reminders, that like be personal with your kids, be invested, it was just a reminder, a back to the basics.

Connie, focus interview	It [the workshop topic] was so relevant and big and global and impacts so many people. It was really powerful; and I think that's why it was so exciting and interesting. It was new and it was an extremely important topic about how to pay attention to law and policy and how to actually help not just watch it go by, so I think that was really interesting.

Table 17. Professional Rejuvenation and Affirmation

These quotes show that workshops and conference sessions can have a powerful impact on teachers' perceptions if they connect with teachers' passions and reasons for engaging in the work of education. Although these experiences held meaning for participants, it is not known whether sustained change in practice was maintained as a result. With these ideas in mind, collaborating teacher surveys were compared and interviews and transcripts were coded to determine what factors impacted perceptions of coaching as an effective method of changing practice.

Collaborating teachers completed a pre-survey to determine a baseline for views on traditional professional development in the areas of *credibility*, *listening*, *objectivity*, *communication*, and *overall impact.* They then completed a post-survey focused on the same indicators as experienced in the coaching relationship. Results are shown in Figure 7 and 8:

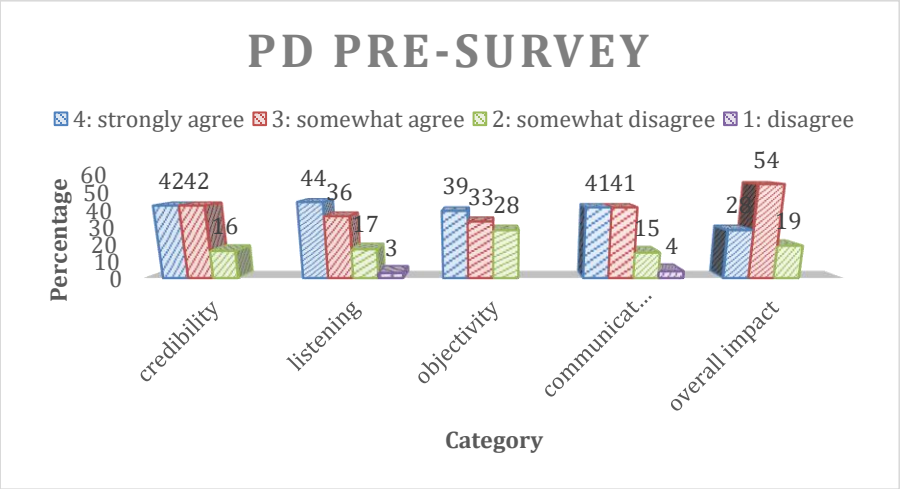

Figure 7. Teacher Pre-survey results

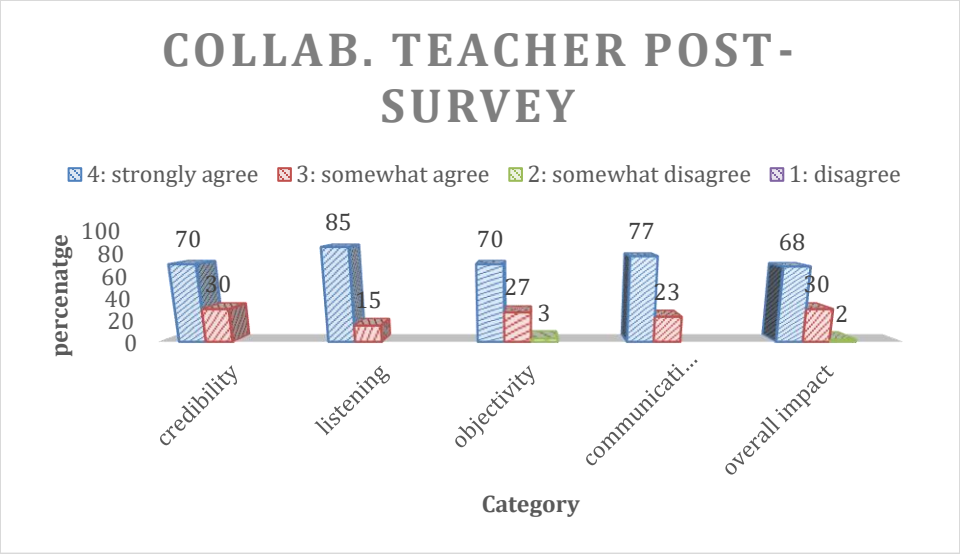

Figure 8. Teacher Post-survey results

Survey results indicated a positive experience with coaching compared to traditional professional development in every category. Collaborating teachers strongly or somewhat agreed almost unanimously that coaching was able to meet the professional development indicators. A further examination of collaborating teacher experiences was obtained from coaching transcripts and focus interviews.

Credibility

Credibility indicators measured teacher perceptions of coaching as applicable to their current classrooms and relevant to their needs. Collaborating teachers responded to prompts measuring the expertise of the coach and whether or not the coach acknowledged the teacher's contribution to the learning. Collaborating teachers expressed satisfaction with the ways in which coaching was applicable to their classrooms and indicated that coaches did take their own contributions into account. Collaborating teacher comments were coded with *Application to Classroom* and *Acknowledges What I Know* codes, as shown in Table 18:

Collaborating Teacher	Application to Classroom
Liz, focus interview	We have actually, we are working on Google classroom, that was my goal and that's what she has been helping me with and we implemented our first assessment on Google classroom the other day and we are happy about that.
Janine, focus interview	I think we are well paired. We get excited about learning the same way and we have a lot of goals. She probably pushes harder for some of those, and I think I did a lot more in [an upper grade] than I can right now in [a lower grade] and that was my goal, for her to come in and push me a little harder in centers and give me ideas so we can make it work. Because with the kids, now this part of the year is a great part of that year. There was all that log in stuff and finding the apps and taking the pictures the correct way, so it's going great. We have done some math visits where she will come in with her class and come in and do some team things and it's been fun.
Eleanor, focus interview	It's personalized, what I need to learn is what we work on. Not what the 5th grade teachers need to do because we are all in such different places. So, having that individualized, just like the kiddos.

Table 18. Application to Classroom

These quotes indicate that collaborating teachers found the coach's assistance applicable to their current classroom contexts and that the collaboration with the coach positively impacted teaching practices in their classroom. Janine mentioned a visit from the partner teacher's class as having a positive impact on application, while Eleanor and Liz mentioned achieving personal instructional goals.

Collaborating Teacher	Acknowledges What I Know
Eleanor, focus interview	In the beginning we didn't know each other so over time we have gotten to know strengths and weaknesses, so she knows what to show me and I can even give some things back to her. And she's always been very open to me asking her questions or running over with my iPad or laptop, so that's been consistent.

Joanna, focus interview	It's encouragement and bouncing off ideas, and have you thought about it this way, have you, what can you do to make this better, and it's really that's what we want to do we want to make learning better and more tangible for our kids.

Table 19. Acknowledges What I Know

Joanna and Eleanor both mentioned a back and forth dialogue approach to coaching and the feeling that their voices were honored in the coaching dialogue. Eleanor noted that she was able to contribute positively to her coach as well, and Joanna described being able to trade ideas back and forth to make learning better for the students in both classrooms.

Some coaches did struggle to keep the focus on what was relevant to the needs of the collaborating teacher, as shown in the *Lack of Relevance* codes below.

Collaborating Teacher	Lack of Relevance
Diane, focus interview	I mean that's great, that [her idea] was really good, but that's just not the way I do it. And maybe I can work to get there if that's the end goal, but that wasn't really solving, I guess MY issue, at the time.
Eleanor, coaching transcript	Coach: You can use all of the osmo apps because they're all good because they are still helping them with their thinking skills. Eleanor: But I'm trying to, you know… Coach: Yeah you want to focus more on the vocabulary, yeah. Eleanor: And learn, like this is not gonna help them unless they would write about it…

Table 20. Lack of Relevance

In each quote above, the coach shows signs of misunderstanding the collaborating teacher's needs and of allowing the coach's vision to supersede that of the collaborating teacher.

Listening

Listening indicators measured collaborating teachers' perceptions of the coaching relationship as providing a safe space for reflection. Indicators also measured perceptions of the coach's ability to understand teacher needs. Collaborating teachers rated this area the highest compared with traditional professional development. Instances of *Active Listening* are noted in Table 21.

Collaborating Teacher	Active Listening
Shay, coaching transcript	Shay: I lost their attention they just were tired, and my biggest struggle was trying to engage them. So, we were doing Nearpod. I did have technology, but we didn't have iPads so we were doing it whole group. So that was tough, and that is something I realized today is like just trying to keep their attention all day long… Coach: You aren't alone in that struggle I mean we all have that struggle. I mean I'm still trying to figure out why did I lose them there, so then you start thinking about your practice and saying ok student engagement is a good focus point because I think that is what makes teaching enjoyable. That's what people are looking at when they come visit you, so when you have them really keyed in, so think about a time when you've really pulled them together and they were really excited and they were on for an extended period of time and you were almost shocked, what were you doing when that was going on?
Joanna, coaching transcript	Joanna: I would like to work in my math group, something in their group time with voice and choice, and I want them to just try something new, whether it's a project related or a new app. Coach: Ok, so something to maybe like add to their voice and choice board that they could model once with maybe a [an older student] and then maybe be able to implement on their own during that seatwork time? So we said in math, so um let's see what are some things that are manageable that we can change right now. Like would you want to take something off of the choice board or add something in? Joanna: Um I think I would like to add it I could temporarily take off something else, just so it's something new and they start getting used to it… but yeah something to add.

Table 21. Active Listening

In each coaching exchange, the coach was able to reframe the teacher's problem and ask a question to further the thinking of the teacher. Shay's coach was able to ask more of a probing question than Joanna's, but both coaches showed evidence of listening to the teacher's concerns and working toward a solution the teacher was comfortable implementing.

Overexcitement was indicated in one focus interview with a collaborating teacher, as shown in Dianne's experience.

	Overexcitement Impact
Dianne, focus interview	I think time and maybe a little bit of communication or not understanding where my issues are, what my problem really is, being able to come to, I don't—her saying I hear what your problem is and this is what I think would solve it I was like wait a second are we talking about 2 different things? So maybe not really hearing me and like wanting to put a really good idea in place that isn't necessarily solving MY issue, you know when you get really excited about something and you want everyone to know about it and so like you find a way, you can justify anything to get that inserted into anything, like I hear your problem and I think the solution is this and me being like… maybe… maybe that's the solution? I left being like is that the solution? Is that what I was saying? And then being like no, that isn't what I was originally getting at.

Table 22. Overexcitement impact

Objectivity

Objectivity indicators measured perceptions of partnership in the coaching relationship. Participants rated the opportunity for dialogue and the balance of positive and negative feedback in the relationship. Twice as many responses fell in the category of *strongly agree* for the coaching relationship when compared with responses for traditional professional development. Interviews and transcripts were coded for *Partnership Dialogue* and *Importance of Feedback.*

	Partnership dialogue
Janine, focus interview	I think that my eyes are opened to a few more things I can do and little bit of accountability. She is like, "Have you tried that? How is it working?" and I think that I have grown because I have also tried to come up with ideas, like could you teach me. So, I am looking around seeing what people are doing, saying "I don't know how to do that. Can you show me that?" or "How did that work for you?" I am questioning her a lot, a sounding board, accountability person and sounding board.
Diane, focus interview	I feel like you can accomplish more if you have a coach who is willing to hear you out and not put their—it's like therapy, like not put their opinion, taking what they have used in the past and in an unbiased… and I did feel like I wasn't going to be judged by whatever I knew or didn't know, which was good, that was a plus.

Table 23. Partnership Dialogue

These teachers felt comfortable talking about gaps in knowledge with their coaches. They felt that the coach would be able to address the needs without judgment and would be a thought partner for the concern.

Other teachers mentioned the importance of specific feedback to drive next steps in the process.

	Importance of Feedback
Toni, focus interview	She can come in for 10 minutes in the room and actually see what's going on, because I can tell you all day long what I intend to happen and what I think happened, but the times she was able to come and just see what was going on and kind of be a fly on the wall… She is going to see things you don't always see or you don't always plan for or that you didn't really know were happening at the same time, so it helps be more reflective.
Shay, coaching transcript	Coach: I only caught like four kids fidgeting in their desks, and I will tell you that would be a tough thing, I'm a fidgeter, so you do have their engagement, so that was one thing we were talking about: are they listening and participating. So, based on those data pieces how do you feel? Shay: I feel like that's pretty good, that is, like of course when you are teaching you don't realize how many are NOT fidgeting and how many are so that's really good feedback, I really am happy to hear that.

Table 24. Importance of Feedback

Each of these excerpts emphasizes the importance of specific feedback and the impact it has for the collaborating teacher. The teachers were able to see another view of their classrooms based on the coach's experience in the room.

Communication

Communication indicators measured whether coaching was focused on teacher outcomes and whether the coach was open to receiving feedback. A majority of respondents ranked this indicator high as well. Collaborating teacher interviews showed that teachers valued a safe space in which to experiment with their goals and ask questions of the coach, coded *Safe Communication*.

	Safe communication
Shay, focus interview	It's comfortable, I feel like the coach is reachable I can send out an email and they respond so, this is the best professional development situation but I haven't really had any bad ones.
Toni, focus interview	I think the biggest thing is it's ok to try and not be successful the very first time. It's safe to make mistakes, it's safe to try something and have it not work exactly the way you intended, and it's ok to reach out and say hey this really didn't work for me. What can we do differently? What would you do or can we scratch all of it and start over? So just having that little bit of safe zone is nice.
Liz, focus interview	I think my coaching experience is going fantastic. My coach is wonderful, she is very patient with me, willing to give me repeated directions many many times.

Table 25. Safe Communication

These quotes show the importance of creating a relationship in which the partner teacher feels safe initiating communication related to enactment of their personal goals. Teachers indicated comfort in asking questions and admitting mistakes during the coaching relationship.

Overall Impact

The overall impact indicators asked teachers to report whether or not the coaching relationship made them more reflective in their practices, had a positive impact on practice, and provided high quality support. The overall impact of coaching was coded as *Increased Understanding*, but collaborating teachers expressed a need for the coaching relationship to continue to truly transform practice. The teachers were also asked if the support provided justified the time spent working in the relationship. Time as a factor became a larger theme that will be discussed later in this chapter.

	Increased understanding
Diane, focus interview	The kids have done most of the growing, and it's easier for me to teach because we don't have to keep going over how you get on your Google Classroom and look at what tasks you are doing. I don't know if I have grown, I have gotten more comfortable with it and using it daily and the kids getting more comfortable.
Liz, focus interview	We have had a minimal number of meetings, when we have had them they have been rushed. I'm not by any means an expert. I'm not ready to run with anything on my own yet, but I today I reached a place where I was more comfortable with it and thinking if I walk away with it and sit down and play with it myself I might be able to do something with it now.
Shay, focus interview	I think I do have better knowledge of writing, I'm not there yet, but I think I have a better understanding of the organization and I am more organized in the classroom.

Table 26. Increased understanding

Teachers saw benefits of the coaching relationship in their classroom implementation of knowledge and skills. However, the teachers expressed a need to continue the experience in order to continue to increase professional capacity. Overall, teachers expressed positive views on coaching as professional development.

Liz saw the value in coaching as a self-selected form of professional learning. As a seasoned teacher, she has been a coach to others and knows the challenges coaches face. In her

focus interview, Liz stated, “Coaching is great if the person being coached is willing to accept the help and the advice. I have been on both sides and I think my coach is very patient, forgiving, and she understands the difficulty I have with technology. And I think coaching if I am willing to go through coaching it’s because it’s something I want for me. So, I think coaching is definitely a good professional development.” Liz’s statement highlights the need for buy-in from the collaborating teacher. If coaching is a forced partnership, the relationship could prove less beneficial and the collaborating teacher may not willingly incorporate new learning into practice. For Liz, the coaching relationship was productive because she felt understood by her coach and felt that she was able to attain personal success on self-identified goals.

Diane identified the personalized nature of coaching as one of the main benefits and related coaching to personalized learning for students. She stated, “So, having someone where it’s like I just want to reach out and see if this is how I am supposed to be doing it and you speak one on one. That takes five minutes as opposed to an hour and a half faculty meeting where it doesn’t apply to everybody” (focus interview). For Diane, quick chats with a coach were more effective and targeted than large group professional development options. Coaching provided an immediate response and allowed her to quickly adjust practice based on coaching conversations. She began to see the connection between coaching and student-centered learning for her students. When discussing whole group faculty meetings, she stated, “I even said to myself, *Is this how my kids feel when they already know what fractions and decimals are and I am like ok we are going to talk about fractions and decimals*?” (focus interview). Seeing the benefit of personalized coaching for herself helped her envision the benefit that shifts in practice could have for students.

Janine felt supported by many in the school, not just her designated coach. She spoke of coaching more broadly, stating, "We are a great school and people do not mind helping. I ask my teammate to lay it out for me she will show me and coach me. I feel like we have a lot of building coaches here. We share our ideas, coaching is better, it's hands on one to one. It's personal" (focus interview). For Janine, a coach was someone who offered immediate assistance to a pressing problem. Coaching meant sharing ideas and working together to achieve goals. Coaching allowed Janine to experience success by engaging in the work alongside a colleague.

These examples emphasize the teacher's positive views of coaching and link coaching to aspects of student-centered learning. They emphasize the individualized nature of the relationship and the immediacy with which coaching can impact practice.

Overarching Themes

Teacher Need for Connection

Throughout the interviews, teachers' need for connection with colleagues became an underlying theme. During conversations with collaborating teachers and coaches, the importance of collegiality was evident in a variety of ways. Teachers needed other teachers as thought partners and as collaborators, even outside of an official coaching relationship. Teachers looked for ways to make connections with others. Instances of this are illustrated in the quotes in Table 27.

Participant	Need for Connection
Vanessa, focus interview	I was talking to her about ideas with "Hey here's a strategy we can test out", having someone overhear and say "Wait, I wanna try to do that!" I think that means a lot to her, who is like "Oh I asked for this, but even my teammates think this is cool." So it might really encourage more utilization across the team as opposed to an isolated teacher trying to do something new and different.
Breanna, focus interview	I had a teacher like help me immensely even though she wasn't a "coach". She was great, and she's like that she's very "Well how can I help you?

	What can you do?" or she would be like "Oh yeah I have had that problem before," which makes me feel fantastic, like when I know someone else isn't perfect it makes me relax.
Diane, focus interview	I feel like my colleagues are my sounding board and if there is something that's not working we will talk about it at grade level. I think it's really hard because when you first start [teaching] you want to be like I know, I know how to reach this kid or I know how to do everything to meet this student's needs, but like you don't.
Holly, focus interview	I have been at schools where somebody wanted to outshine everybody, so they hoard all their stuff and I don't ever want to be that. So, I think that's where that coaching comes in. Anything I am doing that's great, please take it, share it, share it with someone else and someone else.

Table 27. Need for Connection

Teachers needed to bridge the isolation gap and lean on each other for knowledge, resources, and strategies in teaching. Having a colleague affirm ideas or commiserate with problems was a powerful way to make a collegial connection in an isolating profession. As Holly stated regarding professional development, "It's how you set it up, it doesn't matter what you are talking about. It's how you make people feel" (focus interview). For teachers seeking connection, however, time becomes the ultimate limitation.

Time as the Ultimate Factor

Every participant in the research process mentioned time as a barrier to coaching in some capacity. The time barriers were identified and coded into three categories for further discussion: *Resources as Barriers*, *Teaching Duties as Barriers*, and *Teacher Schedules as Barriers*.

Resources as barriers. Resources became the barrier in two different ways during the study. Teachers reported that having too many data sources presented an obstacle to effective data use, coded as *Resource Saturation*. Coaches reported finding coaching resources to be time

consuming and a barrier to ensuring the coaching relationship was effective, coded as *Time to Research.*

		Resources as Barriers
Vanessa, reflection conversation	Resource Saturation	She was like, "I have to pull up 18 different reports to figure out what my kids have done because I have assigned several different things throughout the unit to get data. And they all give me good data, but it would be easier if they just told me `Oh they finished that today' so let me go look at that report to see how this kid did today or these 10 kids, so let me pull the report and look at these 10 kids instead of waiting until all 60 kids finish and you are like oh my goodness one of 60 didn't and you are trying to catch up".
Toni, coaching transcript	Resource Saturation	I know we have a thousand resources, but something that is quick turnaround for data. Again we have a million resources for data but it's all in 40 different places, but if we have something quick and easy to see and say "Ok this went really well the past three days but this isn't going so well", have that on the teacher end of it and have something that the kids are like "Ok this is my next step." I have a must do, can do that they have to go through certain things in the week, and I can kind of put it all together and see what went well and what didn't, but in the middle of the week you know…
Breanna, reflection conversation	Time to Research	Like I do not have time to do anything, to look for anything, like even I'm supposed to be making a list of stuff to buy [for my classroom] and I don't even have time, it's just been so much this year.
Connie, reflection conversation	Time to Research	I think it would help like if we have a resource bank of things to grab because as a coach we want to go digging but being new you don't know where the resources are and not having any additional training… it would be a great grab and go like use this you're done.

Table 28. Resources as Barriers

Collaborating teachers reported a desire to use data more often to drive instruction but found the multitude of data sources to be a hinderance to this practice. Having many programs for many purposes became counter-productive, as none of the resources were used effectively. Teachers expressed a desire to streamline the data collection process and make accessing and managing data an easier task in order to positively impact instruction.

Coaches, on the other hand, felt that finding and developing tools for coaching was an obstacle for effective coaching. Collaborating teachers had a desired outcome in mind, and coaches felt pressure to find or develop tools to meet the desired end result. Finding or developing resources in addition to teaching duties and actual face to face meetings and classroom observations became overwhelming for coaches and led to a sense of frustration with the coaching process.

Teaching duties as barriers. Both coaches and collaborating teachers faced full teaching schedules in addition to their desire to work collaboratively with a peer. Coaches wanted more time to observe peers in action and to assist in implementation of strategies but struggled to balance that with their own teaching responsibilities.

	Teaching Duties as Barriers
Vanessa, focus interview	I can't ever go watch her teach because I have children or she isn't teaching what I want to observe when I don't have children, so being able to be like "Hey I am going to observe her this day", I won't do that until I have shown her the strategy.
Connie, group focus session	We want to be a part of the action cycle where you are like in the trenches with them. That's where the time comes in; how do we help them in a way that doesn't impede on your classroom time?
Tasha, reflection conversation	I feel like the support I have is great, but maybe just to find the time to meet with her. I hate to take time from the kids but maybe at end like we have a quick social studies lesson and I can make it a short one that day and hop into her class for a few minutes, because it wouldn't take long, like 10 minutes, so I don't want to take too much time from my kids.
Joanna, focus interview	Emily: What has been your biggest struggle? Joanna: Time… Time just trying to coordinate between their schedule and our schedule and sometimes we were testing and sometimes they were doing things so just getting the time to be intentional about meeting.

Table 29. Teaching Duties as Barriers

Although the power in peer coaching comes from working with a knowledgeable other who faces the same realities and challenges as you, this also became a roadblock for a successful coaching relationship. The coaches in this study sought to carefully balance time out of their own classrooms in order to maximize the experience for their peer and minimize impact on the students in their charge. One way of overcoming this obstacle was to incorporate their own students as peer coaches when working in the classroom of their collaborating teacher.

Teaching schedules as barriers. Busy school day and after school schedules also prevented meaningful collaboration among peers.

	Teacher Schedules as Barriers
Vanessa, focus conversation	Time which I am sure is what everyone is going to say… I think with time it's just our afternoons and our days don't match up we don't have any time during the day where there is ever 20 minutes to talk. It has to be before or after school, which is fine, but I know I have had meetings almost every day after school… So I want to make it useful to her and not make it feel like I am taking up her personal time, but she also asked for this so just finding the time when we are both ok with meeting and we are both available to meet has just been hard.
Holly, reflection conversation	The only barrier has been time. We have these different meetings after school, we have these meetings during school, we have this thing this day, so that's been the only barrier is the time to actually hook up.
Tasha	It circles to time, but I don't want to say that again, there's gotta be…just even another planning period like one day a week. I've been in schools where they had two specials one day a week. Because by the time I get back to my room and answer a couple of emails, and then there are meetings after school, and I am trying to work less on the weekends, just for like mental wellness… so trying to figure out if we had a little bit of extra time I could get more accomplished during the day, like during the day sometimes I don't check my email until after lunch, and I have it on my phone so if there is something important, but there are sometimes you get a parent email you have to sit and think about and that takes me time, like a good 30-40 minutes to word it properly, and it's hard like during the day we don't get to do much of anything so it relies on after school for planning and grading.

Table 30. Teacher Schedules as Barriers

Teachers cited after school meetings, planning period meetings, and class and grade level time constraints as barriers in the way to effective coaching. The school schedule only provides teachers with 45 minutes of planning four days a week, and teachers were also required to attend grade level planning sessions, faculty meetings, and other committee meetings after school. The coaches in this study attended voluntary TLT meetings after school in addition to all those required by the school. This also caused frustration for coaches, as they felt they it was a struggle to effectively schedule time to set goals and debrief observations with their partner teachers.

Summary

Overall, coaches reported some struggles within the relationship and worked to develop solutions that would meet the needs of their collaborating peers. Coaches reported growth through the process, and collaborating teachers reported favorable gains as well. Coaches reported more awareness of the potential pitfalls in coaching and spoke openly about personal strengths and weaknesses in the process. Vanessa stated, "I think the way I listen and ask questions has really changed. And that's helped me really get more of a sense of what they want to do and… I didn't go in with an expectation; I went in and listened and then … the ball rolled itself instead of me thinking *Oh they should do this*. It was something they found was a need in their classroom which made all the difference" (focus group interview).

Coaches reported growth in credibility, objectivity, and communication. Although some coaches initially struggled with self-doubt, continuing in the relationship helped assuage this feeling. Coaches worked through this by trying things with their own students and by collaborating with teachers during class time using their own students to help. Coaches also reported an awareness of their own subjectivity and described methods used to correct their

responses. For this reason, coaches reported growth in this area as well. Communication was also a growth area for coaches, as they learned the importance of frequent and timely communication within the coaching relationship. Coaches, however, realized a need to balance constructive feedback with positive comments after observation sessions. Listening was more of a struggle for coaches. Excitement for the coaching relationship and the projects identified by collaborating teachers sometimes negatively impacted the relationship, as coaches would offer too many suggestions or would move too quickly for their collaborating teacher. Coaches struggled to curb their enthusiasm and risked overwhelming their partner teachers with ideas.

Collaborating teachers rated coaching favorably in all areas and appreciated the personalized attention to self-identified goals. Collaborating teachers felt heard in the process and felt that they were able to offer positive contributions to the coaching dialogue. When coaches offered specific and targeted feedback, collaborating teachers had a better view of current classroom reality. Collaborating teachers reported that coaching was a safe space in which to meaningfully reflect on practice and work to make improvements on personal goals.

Coaches and collaborating teachers filled their need for personal connection through the coaching relationship, although time was a limiting factor for meaningful partnership and change. Teachers worked through scheduling difficulties and balanced classroom and coaching duties in order to engage in a meaningful coaching relationship. The power for teachers came from finding a voice within the professional development process and in using current classroom needs to drive the coaching experience. The power for coaches came from a sense of self-awareness and a passion for bettering themselves as they worked to better a peer.

CHAPTER 5: IMPLICATIONS

Implications for Practice

The aim of this study was to define supports needed to enhance the instructional coaching experience for both the coach and the collaborating teachers involved in the coaching relationship. Coaches identified areas where more support was needed, namely listening and objectivity. Coaches also identified struggles with feelings of credibility in the coaching relationship and the need to have more time to develop quality supports for teachers. To address these needs, suggestions for strengthening coaching preparation programs will be discussed in this chapter.

Collaborating teachers rated coaching favorably compared with traditional forms of professional learning but cited time as a limiting factor for achieving a true collaborative partnership. The results identify areas of emphasis to further the impact of coaching on changing practice. Effective use of time and supportive structures for teacher collaboration will be discussed as areas for emphasis when developing systems for peer coaching.

Finding 1: Coaching Preparation for Active Listening

Reflection allowed coaches to see the areas for growth in their own coaching practice. This suggests that embedding reflective structures into the work of instructional coaches is important for developing more effective practitioners who can identify their own areas for growth. Individual reflection on practice, however, runs the risk of simply confirming existing beliefs and practices (Fendler, 2003). Collaborative reflection ensures that outside perspectives are introduced and considered when reflecting on action.

Coaches struggled with the concepts of listening and objectivity and became more aware of these needs as the coaching relationship progressed. This suggests that coaches would benefit

from explicit training on active listening processes prior to engaging in a peer coaching relationship. A number of resources exist for this purpose, as cited in the works of Downs (2008), Topornycky and Golparian (2016), Spataro and Bloch (2018), and Nemec, Spagnolo, and Soydan (2017).

To encourage development of active listening skills, coaches need explicit instruction in the components of active listening and the potential pitfalls that may be encountered in the process. Topornycky and Golparian (2016) listed the key components of active listening as paying attention, showing you are listening, providing feedback, deferring judgment, and responding appropriately. Similarly, Downs (2008) defined the process as "attending, understanding, interpreting, responding, and remembering" (p. 1). Knowing the definition and internalizing the skills required, however, are two very different things (Spataro & Bloch, 2018).

Spataro and Bloch (2018) warned that teaching active listening is a complicated process and learners need to practice the process in order to apply the skills to real-life situations. Practice can occur through video analysis, practicing with imagined scenarios, or practicing during real life situations and reflecting using rating scales or debriefing sessions. Nemec, Spagnolo, and Soydan (2016) suggested providing formulas for use in the early stages of active listening training. They warned, however, that the use of formulas may feel uncomfortable and contrived during initial implementation. As coaches begin to internalize the process, however, the formula will become more of a guideline than a mandate for implementation.

Trust is an essential component of the active listening collaboration. Without open and honest feedback from the dialogue partner, the listener may feel successful with the process but may actually be missing the message of the speaker. Topornycky and Golparian (2016) warned of the potential pitfalls of parroting and misinterpretation, both of which could negatively impact

the sense of partnership in a coaching conversation. In misinterpretation, the listener projects his or her own understanding into the speaker's experience and therefore usurps the speaker's needs by envisioning the result from the perspective of the listener. In parroting, the listener repeats back the speaker's words without input or interpretation. Parroting can result in a sense of the speaker being listened to but not truly heard, which results in a disconnect from the collaborative relationship (Topornycky and Golparian, 2016).

While there is no universal solution to ensure active listening is effective, coaches can be provided the tools to self-monitor and can continually practice to hone their active listening skills. Ultimately, coaches need to understand the basic principles of active listening and have continuous opportunities to implement and reflect on implementation. The ultimate responsibility for effective active listening, as Nemec, Spagnolo, and Soydan (2016) contended, rests on the listener and not on the speaker who is attempting to be heard. Therefore, coaches must be vigilant in continually assessing their listening practices.

Finding 2: Increasing the Impact of Coaching

Issues of time and collaboration are intertwined, as true collaboration is hard to achieve without time in which to work together purposefully. But even with time allotted, some teachers fail to truly connect and shift practice in meaningful ways. Teacher teams can fall victim to what Ning, Lee, and Lee (2015) termed "contrived collegiality" (p. 339), or teachers working simultaneously, not collaboratively, to advance directives from administration. This stands in contrast to authentic collegiality, in which teachers work toward the betterment of the school and of themselves as practitioners.

In order to foster authentic collegiality, schools need to foster trust in teacher relationships (Tooley & Connally, 2016). Trust cannot be mandated or manufactured but must

be built through repeated interactions designed to further the collaborative work of teachers. Teachers must be willing to participate and feel safe sharing experiences and receiving feedback from peers. As Tooley and Connally (2016) suggested, teachers need to become accustomed to giving and receiving feedback to each other. This opportunity cannot occur unless teachers are able to establish a collective culture and break down the individualized view of teaching (Ning, Lee, & Lee, 2016). According to Brante (2012), trust is the key to changing our schools.

Although developing trust and collective responsibility takes more than simply dedicating the time in which to do so, developing supporting time structures is a starting place to changing practice. Schools are often under constraints from systems and states regarding professional development funding and time structures. Indeed, it is easier to host a workshop aimed at changing practice than to integrate teacher supports throughout the school day and year. Therefore, schools often have professional development offerings based on convenience rather than on prospective impact (Tooley & Connally, 2016). Unfortunately, ingrained policies and practices do often stand in opposition to meaningful changes in educational practice. What, then, can individual schools do to bridge the gap and develop supportive structures within time constraints given?

One way schools can address this is to acknowledge, rather than downplay, the time barrier. Schools can approach professional learning with time constraints in mind, prioritizing the time teachers will need for true learning to take place (Morgan & Bates, 2018). To prioritize time for professional learning, collaboration, and implementation, schools and teachers can conduct audits of existing uses of time and rank instructional tasks in order of importance. Doing so can help teachers visualize the ways in which time can be more purposefully spent and can allow for unnecessary tasks to be identified and discarded. Once this has occurred, time for

coaching and collaboration can be added to the schedule and protected within the daily and weekly schedule (Morgan & Bates, 2018). Though self-monitoring does not change instructional time limits, it provides teachers with an awareness of how time is used and can inform prioritization decisions (Vannest, Soares, Harrison, Brown, & Parker, 2010).

School administrators, too, can use self-monitoring to develop an awareness of all initiatives in play during a school year and can use such an audit to combat the "incoherent implementation" (Tooley & Connally, 2016, p. 12) of too many initiatives at once. As Bethany stated in the second group focus interview, "Sometimes it is overwhelming. You can't wrap your head around too much change at one time, so then it's overwhelming and your bucket is overflowing, and you can't fit the time in. Sometimes you are resistant to change because you don't have time." Learning takes time, and schools must honor that process for teachers just as they do for students by prioritizing structures that foster deep learning.

On a practical level, rethinking time means rethinking the number of initiatives and the structure of mandatory meetings during the school year. This can also mean offering incentives for work after school hours or hiring support staff or substitute teachers to allow longer periods of continuous collaboration among teams. Administrators can protect time by delivering announcements and updates through memos or emails and preserving face to face time for collaborative reflection and planning (Shah, 2011). Although creating the structures is important, honoring and encouraging the process is even more critical. As Shah (2011) highlighted, "Collaboration cannot be mandated, only supported" (p. 2). Schools and administrative teams cannot speak collaboration into existence but can emphasize the importance by protecting the process.

Finding 3: Importance of a Collectivist Culture

Those engaging in this study, whether as coaches or collaborating teachers, willingly offered their time and insight far beyond the normal requirements of their teaching days. Each person, to some extent, cited time as a barrier to more effective collaboration, yet most did not abandon the coaching relationship to preserve more time for their own teaching duties.

One defining characteristic of teachers in this study was the desire to work with others to better the teaching profession. Both coaches and collaborating teachers expressed a collectivist view of the profession in which they desired to set aside self and personal desires in order to work for a greater good (Ning, Lee, and Lee, 2015). Teachers expressed a sense of passion for the work and a desire to raise up others in order to contribute to a greater vision. Connie stated, "I enjoy helping other people, and I think watching the impact they have on their classroom is exciting…to see them learn and grow" (focus interview). The desire to engage in coaching did not come from a sense of bettering self but of bettering the whole school community. Tasha showed that passion is important in the work of coaching, saying, "I want to be able to learn new things from my coworkers, and having excited people constantly around is good because excitement is contagious. Everyone is excited to try and share new things and being in the group helps me be excited too" (focus interview). Coaches engaged in the work to spread passion and excitement and were able to connect professionally in a way that impacted others in a meaningful way.

Collaborating teachers wanted to continue learning, and they were motivated by a variety of factors. As Joanna stated, "I feel like, as I teach my kids, you are always a lifelong learner. And I definitely—I haven't arrived at teaching. I think I have a lot of experience to put into it, but I have a whole lot more to learn" (focus interview). Some teachers wanted to engage in coaching to keep up with changes and have advanced knowledge of upcoming initiatives. Some

wanted to keep practices current, like Liz who stated, “I’ve been teaching for a long time and every year I look for a new challenge, something to keep me fresh, something to keep me abreast of what’s been going on in education” (focus interview).

Teachers cited a number of ways they continually seek to improve practice, from reflection to peer collaboration to searching for resources on the internet. Teachers welcomed feedback from others and the fear of failure was lessened with the collectivist view of practice. Holly’s description of her collaborating teacher illustrates this point: “Even when she fails, as you do, or she is like this totally went terrible, she still just wants to keep going and learn what kids need. How can I learn to do it better next time? How can we roll it out better next time?” (reflection conversation). Thus, teachers who “share their experience as effective instructional strategies with each other through continuous inquiry and reflective dialogue” (Ning, Ning, & Lee, 2016, p. 338-339) are able to break down the barrier of privatized practice to create a meaningful collective educational culture (Lortie, 1975).

Finding 4: Implications for Coaching Coaches

In preparing instructional coaches, trust is the foundation of the work. Trust is created by dedicating the time necessary to build relationships, to share ideas, and to give and receive honest feedback on the coaching experience. Eikenberg (2018) stated that trust is not easily given but instead can be cultivated over time in small moments designed to build a personal connection.

Trust is built through focusing on relationships and modeling openness and vulnerability in feedback conversations. Those training coaches must create a space in which failure is destigmatized and resilience is modeled. Transparency in coaching conversations can lead to the creation of a feedback-driven culture, one in which growth is valued as a collective goal

(Eikenberg, 2018). Transparency and an effort to cultivate a feedback-driven culture can work to address coaches' lack of confidence in ability, as coaches-in-training work together to debrief the successes and failures of their coaching efforts and to collectively determine next steps in the coaching relationship.

In order to successfully coach coaches, the importance of feedback is critical. Coaches need to learn to successfully give and receive feedback and time must be dedicated to these practices. Brown (2018) contended that those offering feedback to others need to model the behaviors necessary to effectively receive and implement feedback. Brown (2018) stated that the person offering feedback must be "open, curious, vulnerable, and full of questions" (p. 201) in order to help the person receiving feedback mimic these characteristics. Feedback offered in a trusting and collectivist community is intended to drive the goals of the group, and members must practice staying open and avoiding the tendency to become defensive when receiving critique.

Brown (2018) suggested that the ultimate goal in a feedback cycle is "a skillful blend of listening, integrating feedback, and reflecting it back with accountability" (p. 204). A school culture that embraces open and honest feedback offers the possibility of a school focused on collective growth and success. When the reflective feedback cycle becomes the norm, teacher isolation is lessened as teachers embrace a collective mentality to improving teaching and learning.

The Coachable Teacher

The educators in this study offered a glimpse at what a coachable teacher looks like in action. Passion for the work is a defining characteristic of a coachable teacher. Teachers expressed excitement for learning new things and for sharing ideas with others. The coachable

teachers in this study also showed vulnerability by opening their classrooms and practices to the scrutiny of others, even at the risk of emotional discomfort. Teachers showed a desire to end the isolation of the profession by embracing a collectivist culture of sharing ideas and resources freely and of opening their classrooms for authentic collaboration. Coachable teachers are also innovative and creative, finding ways around problems and barriers to collaboration and time. These findings suggest that schools can identify coachable staff and work to support the work of these teachers by finding authentic ways for teachers to work together.

Limitations of this Study

This study was conducted at one setting using a small sample size of teachers. Therefore, the findings reported in this study are representative of the case in question and have the potential to be replicated at future research sites. This study was conducted at the elementary level only, and results may differ when implemented at the secondary setting. Results may not be consistent in settings where time structures for the school day are allotted differently. This study was conducted during one school year, and results could shift if implementation time was extended. Replication of the study in additional settings would yield details regarding reliability and generalization of results (Denscombe, 2014).

Some teachers in this study expressed difficulty recording coaching conversations with peers. Therefore, not all coaching dialogues were able to be transcribed and analyzed. Teachers may have felt self-conscious when recording which could have impacted the authenticity of the coaching conversation. Connie illustrated this point at the group focus interview: “We would have the recording and have the conversation and be like that’s good, and then turn it off and they would be like ‘I’m really excited!’ and then all of a sudden brilliance comes out!”

Case study research relies on informant contributions, and therefore case study researchers must rely on the interpretations of participants when the researcher cannot be present for the activity (Stake, n.d.). The data reported in reflection and focus interviews was the participant's perception of events in cases where coaching dialogue could not be recorded. It is also possible that study participant reflections were clouded by the knowledge of what they felt the researcher wanted to hear, known as the Hawthorne effect (Frey, 2018). Study participants were aware that the coaching relationship was being investigated, and they may have consciously or subconsciously provided answers based on their understandings of the research purpose (Frey, 2018). Teachers in this study participated under time constraints of student duties and other school meeting responsibilities. Therefore, time to effectively engage in a deep conversation may have been impacted as well.

This case study provides insight into the coaching relationship as it developed at the site. The case study is meant to further the development of a theory, not prove a definitive answer. This case study serves to further the field of research for supporting instructional coaching relationships. Denscombe (2014) concluded that the case study provides findings that can then be further researched in order to continually refine the theory.

Implications for Future Research

This study investigated the impact that reflection on practice had on coaches' perceptions of personal growth in a coaching relationship. Additionally, collaborating teacher views of coaching as effective professional development were examined. Data analysis highlighted additional areas where further research could contribute to additional understandings of coaching effectiveness.

Coaches' reflections highlighted the gap in listening and objectivity skills and the need for additional supports to further implementation. While this study comprised a broad view of how reflection impacted perception of growth, a narrower study focusing specifically on active listening could provide additional details on perceptions of effectiveness in a coaching relationship. Narrowing the focus to this specific skill set could shed light on how these skills are developed and which specific supports lend themselves to effective training of instructional coaches. The original design of this study intended coaches to listen to and reflect on their own coaching audio. Participants, however, were mostly reluctant to engage in this activity due to time constraints and technical difficulties when recording conversations. Future research using this design could provide powerful insight into how coaches develop active listening skills and what impact this type of reflection has on perceptions of coaching growth.

Additionally, coaches in this study served as peer collaborators who themselves still held full classroom responsibilities. Therefore, time for coaching duties posed a barrier to further collaboration. Schools and systems do employ coaches who have dedicated time, whether through partial teaching schedules or through full coaching roles without classroom obligations. More research could be done to analyze perceptions of growth and collaborating teacher experience within these frameworks to determine if similar supports are needed. Because the coaches in this study had the credibility of also being classroom teachers, a future study investigating factors impacting effectiveness could shed light on issues of credibility and trust when coaches are more removed from the daily classroom reality.

Teachers in this study were working collaboratively to further the work of student-centered learning. However, many teachers identified goals that were more tied to technology tools than to teaching practices. Further research could delve into teacher perspectives of

student-centered learning and teacher understanding of implementation. This work could identify further supports needed to truly shift practices, with or without technology tools.

Final Thoughts

Coaching has the potential to transform how teachers work together to impact the teaching professional. True coaching can become a collaboration unlike any other form of professional learning. For some, this relationship may be a first glimpse at the impact of a true collegial relationship aimed at bettering not just the individual teacher but the profession as a whole.

Exploring this impact was an important reminder of the power in collaboration among teachers and the urgency with which teacher leaders must fight the forces of teacher isolation that exist in our traditional school structures. Although it was often difficult, the teachers in this study found creative ways to combat teacher isolation and to bring the power of collectivist action to their classrooms and students. Conducting this study allowed me to see how these ideals impact my own practice and gave me the opportunity to explore areas for growth in my own coaching practices.

Ultimately, improving teaching is about improving learning for students. Collaboration among teachers serves as a model for students and allows students to benefit from the strengths of the many rather than the strengths of the few. It is my sincere hope that the work done in this study can continue to impact the development of teacher leaders and therefore positively impact student outcomes.

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Appendix A: Coaching Pre-Assessment

Credibility Indicators	4: I feel confident about this.	3: I think so.	2: I'm not sure.	1: I don't know yet.
I am aware of the classroom realities at our school, and feel I will be able to adapt my coaching accordingly.				
I believe the teacher I work with will find my experience relevant to his/her needs.				
I feel I have the credibility to help teachers reflect on their own practices.				
I will be able to share my knowledge with peers while honoring and integrating their knowledge as well.				

Listening Indicators	4: I feel confident about this.	3: I think so.	2: I'm not sure.	1: I don't know yet.
I feel comfortable pushing my peers to reflect deeply on their own practices.				
I can create an environment in which my partner teacher will be able to express concerns and ask questions.				
I will be able to provide safe opportunities for teachers and staff to reflect honestly on their practice.				
I can hear and process an issue from multiple perspectives (i.e., teacher, student, administrator, parent, etc.).				

Objectivity Indicators	4: I feel confident about this.	3: I think so.	2: I'm not sure.	1: I don't know yet.
I will be able to listen to my collaborating teacher's plans and observe their actions without judgment, analysis, or critique.				
I will be able to have dialogue with my collaborating teacher without projecting my own values and beliefs onto the conversation.				
I can use a variety of techniques to challenge my collaborating teacher to acknowledge his/her assumptions.				
I will be able to encourage my collaborating teacher to change/expand his/her practice while simultaneously acknowledging his/her successes.				
I feel confident balancing positive and constructive feedback.				

Communication Indicators	4: I feel confident about this.	3: I think so.	2: I'm not sure.	1: I don't know yet.
I can provide clear, specific, and accurate feedback to my collaborating teacher about classroom observations.				
I can keep coaching focused on the achievement of agreed-upon outcomes.				
I will be open to feedback on my communication style and am willing to change my practices in order to be more effective.				
I know how to communicate effectively, and regularly model those strategies in my communication with colleagues.				
During conversations with teachers, I will be comfortable using language that is clear, nonthreatening, and objective.				

Adapted from:
Insight Education Group. (2017). *Coaching for change: 3 tools for assessing coaching competencies*. Retrieved from http://www.insighteducationgroup.com/instructional-coaching-competencies-tools

Appendix B: Coaching Post-Assessment

Credibility Indicators	4: I feel confident I did this.	3: I think I did this.	2: I'm not sure I did this.	1: I didn't do this.
I was aware of the classroom realities at our school, and feel I adapted my coaching accordingly.				
I believe the teacher I worked with found my experience relevant to his/her needs.				
I felt I had the credibility to help my teacher reflect on his/her own practices.				
I shared my knowledge while honoring and integrating my collaborating teacher's knowledge as well.				

Listening Indicators	4: I feel confident I did this.	3: I think I did this.	2: I'm not sure I did this.	1: I didn't do this.
I felt comfortable pushing my peer to reflect deeply on his/her own practices.				
I created an environment in which my partner teacher was be able to express concerns and ask questions.				
I was able to provide safe opportunities for my partner teacher to reflect honestly on his/her practice.				
I was able to hear and process an issue from multiple perspectives (i.e., teacher, student, administrator, parent, etc.).				

Objectivity Indicators	4: 100% of the I feel confident I did this.	3: I think I did this.	2: I'm not sure I did this.	1: I didn't do this.
I was able to listen to my collaborating teacher's plans and observe his/her actions without judgment, analysis, or critique.				
I was able to have dialogue with my collaborating teacher without projecting my own values and beliefs onto the conversation.				
I used a variety of techniques to challenge my collaborating teacher to acknowledge his/her assumptions.				
I was able to encourage my collaborating teacher to change/expand his/her practice while simultaneously acknowledging his/her successes.				
I felt confident balancing positive and constructive feedback.				

Communication Indicators	4: I feel confident I did this.	3: I think I did this.	2: I'm not sure I did this.	1: I didn't do this.
I provided clear, specific, and accurate feedback to my collaborating teacher about classroom observations.				
I kept my coaching focused on the achievement of agreed-upon outcomes.				
I was open to feedback on my communication style and was willing to change my practices in order to be more effective.				
I communicated effectively, and regularly modeled those strategies in my communication with my partner teacher.				
During conversations with my partner teacher, I was comfortable using language that was clear, nonthreatening, and objective.				

Adapted from:
Insight Education Group. (2017). *Coaching for change: 3 tools for assessing coaching competencies*. Retrieved from http://www.insighteducationgroup.com/instructional-coaching-competencies-tools

Appendix C: Collaborating Teacher Pre-Coaching Survey

Think about professional development sessions you have attended or activities you have engaged in within the past year.	4: Strongly Agree	3: Somewhat Agree	2: Somewhat Disagree	1: Disagree
Expertise/Credibility indicators				
The professional development was applicable to my classroom realities.				
The professional development was relevant to my needs.				
The professional development activities were relevant and meaningful.				
The professional development session acknowledged what I know while adding other's expertise to the experience.				
The professional development facilitators were knowledgeable about curriculum and instruction.				
Listening indicators				
The professional development facilitators understood my needs.				
The professional development facilitators gave my concerns and ideas serious consideration.				
The professional development session provided safe opportunities for me to reflect honestly on my practice.				
I was able to have conversations about practice with the during the professional development session(s).				
Objectivity Indicators				
I viewed the facilitator as an instructional partner.				
The professional development facilitator did not project his/her own values and beliefs into the session.				
The professional development pushed me to change/expand my practice while simultaneously acknowledging my successes.				
The professional development session offered me a chance to receive positive and constructive feedback.				
Clear and effective communication indicators				
The professional development gave me clear, specific action steps for classroom practice.				
The professional development met the outcomes I was looking for.				
I was able to provide meaningful feedback on the professional development session(s).				
Overall Impact indicators				
The professional development offering made me more reflective about my practice.				
The professional development session(s) positively impacted my professional practice.				
The impact of the professional development on my practice justifies the time I spent in the session(s).				
The professional development has helped me implement the instructional goals identified by the school.				
The professional development has helped me develop my lessons to better meet the individual needs of my students.				
I feel professional development offering was high-quality.				

Adapted from:
Insight Education Group. (2017). *Coaching for change: 3 tools for assessing coaching competencies*. Retrieved from http://www.insighteducationgroup.com/instructional-coaching-competencies-tools

Appendix D: Collaborating Teacher Post-Coaching Survey

	4: Strongly Agree	3: Somewhat Agree	2: Somewhat Disagree	1: Disagree
Expertise/Credibility indicators				
The coach is aware of my classroom realities and adapts accordingly.				
I find the coach's experience relevant to my needs				
The coach has guided me towards relevant and meaningful professional development activities.				
The coach acknowledges what I know while adding his/her own expertise to our discussions.				
The coach is knowledgeable about curriculum and instruction.				
Listening indicators				
The coach listens attentively to understand my needs.				
The coach gives my concerns and ideas serious consideration.				
The coach provides safe opportunities for me to reflect honestly on my practice.				
When we are having conversations, the coach avoids distractions and devotes full attention to me at that particular time.				
Objectivity Indicators				
I feel that the coach is my partner.				
The coach is able to dialogue with me without projecting his/her own values and beliefs onto the conversation.				
The coach effectively pushes me to change/expand my practice while simultaneously acknowledging my successes.				
The coach provides me with a balance of positive and constructive feedback.				
Clear and effective communication indicators				
The coach provides me with clear, specific, and accurate feedback about classroom observations.				
The coach keeps professional conversations with me and other staff focused on the achievement of agreed-upon outcomes.				
The coach is open to feedback on his/her communication style and is willing to change practices in order to meet the needs of teachers and staff.				
Overall Impact indicators				
The coaching has made me more reflective about my practice.				
The coaching has positively impacted my professional practice.				
The impact of the coaching on my practice justifies the time I spent working with the coach.				
The coach has helped me implement the instructional goals identified by the school.				
The coach has helped me develop my lessons to better meet the individual needs of my students.				
I feel the coach provided high-quality support.				

Adapted from:
Insight Education Group. (2017). *Coaching for change: 3 tools for assessing coaching competencies*. Retrieved from http://www.insighteducationgroup.com/instructional-coaching-competencies-tools

Appendix E: Goal Setting Conference Template

Step 1: What's Going On?

1. The story:
    a. What are you struggling with or wanting to improve?
    b. What's on your mind?
2. Ask probing questions:
    a. Is there anything you may have missed?
    b. If ___ were here now, what might he/she be saying?
    c. What would someone else see if they observed this situation?
3. Decide on a priority:
    a. What's the most important focus area based on what we have talked about today?
    b. Which part are you passionate about tackling first?
    c. Which change would make the biggest difference to you right now?
    d. What feels like a manageable change to tackle right now?

Step 2: What do you need or want?

1. Imagine:
    a. What would success with this look like?
    b. If you could wave a magic wand and make it perfect, what would tomorrow look like?
    c. When you accomplish this, how are you feeling? What are you thinking?
2. Creating a goal:
    a. Circle/list the top 3 things that are most important to you.
    b. What can realistically be changed?
    c. Create a SMART goal
        i. Specific: What is the goal?
        ii. Measured: How will you measure progress/success?
        iii. Achievable: What roadblocks do you anticipate? What resources do you need?
        iv. Relevant: Why is this important to accomplish?
        v. Timed: Create a timeline for achieving the goal.

Step 3: How can you get there?

1. Strategies:
    a. Who could help you?
    b. What are your ideas?
    c. What has worked for others?
2. Choosing a Strategy:
    a. Which path seems best for your goal?
    b. What seems do-able?
3. Action plan:
    a. What will you do first?
    b. What are the check-in points?
    c. What are your main tasks?
    d. How will you know if it is working?

Developed from: G. Egan, *The Skilled Helper*, International Edition as cited in
Connor, M. & Pokora, J. (2012). *Coaching and mentoring at work: Developing effective practice* (2nd ed.). [eBook]. Retrieved from Overdrive

SMART Goal:

1. Specific: What is the goal?
2. Measured: How will you measure progress/success?
3. Achievable: What roadblocks do you anticipate? What resources do you need?
4. Relevant: Why is this important to accomplish?
5. Timed: Create a timeline for achieving the goal.

PEERS* Checklist:

Powerful: Makes a difference in children's lives	
Easy: Simple, clear, easy to understand	
Emotionally compelling: Matters a lot to you, the teacher	
Reachable: Has a measurable outcome/strategy	
S: Student-focused: addresses a student achievement, behavior, or attitude outcome	

Possible strategies (list as many as possible)

Review the strategies. Circle the best option.
Assistance:
Resources I need:
People who can help:

Plan:
First step:
Main tasks:
Timeframe for main tasks:
Evaluation method:

Developed from: G. Egan, *The Skilled Helper*, International Edition as cited in
Connor, M. & Pokora, J. (2012). *Coaching and mentoring at work: Developing effective practice* (2nd ed.). [eBook]. Retrieved from Overdrive
*Adapted from: Knight, J. (2018). *The impact cycle: What instructional coaches should do to foster powerful improvements in teaching.* Thousand Oaks, CA: Corwin Press.

Appendix F: Post Observation Reflection Script

1. What are your thoughts about the lesson?
2. What do you feel went well?
3. What would you do differently if you were going to try that lesson again?
4. What would you need to change (as the teacher) to make that lesson more effective?
5. What would the students be doing differently if the lesson was more effective?
6. Let's look at the measure of progress we identified. How does this lesson measure up?
7. What additional changes do you feel comfortable making to continue your growth?
8. What are your next steps?

Appendix G: Coach's Reflection Interview Protocol

1. How do you feel your coaching sessions are going so far?
    a. Optional follow-up questions:
        i. Tell me more/What makes you say/think that?
2. What is the biggest success you have had?
    a. Optional follow-up questions:
        i. Tell me more/What makes you say/think that?
3. What would you say your biggest struggle has been?
    a. Optional follow-up questions:
        i. Tell me more/What makes you say/think that?
4. Which, if any, of the coaching instructional topics we have covered have helped you the most?
    a. Optional follow-up questions:
        i. Tell me more/What makes you say/think that?
5. Which have helped you the least?
    a. Optional follow-up questions:
        i. Tell me more/What makes you say/think that?
6. What will you do differently next time you meet with your collaborating teacher?
    a. Optional follow-up questions:
        i. Tell me more/What makes you say/think that?
7. What supports do you need?
    a. Optional follow-up questions:
        i. Tell me more/What makes you say/think that?

Appendix H: Focus Interview Questions

Background

1. How many years have you been teaching?
2. Describe your professional career so far.

Change Attitudes

3. What do you do on a daily or weekly basis to improve your teaching?
4. What do you feel are the benefits of implementing student-centered learning?
5. What do you feel are the detriments of implementing student-centered learning?
6. What are the barriers you have experienced in implementing student-centered learning? How have you addressed these in your own practice?

Attitudes Toward PD

7. What are your beliefs about how you learn best?
8. Describe the best professional development experience you have had.
9. Describe the worst professional development experience you have had.

For Coaches in training

Coaching Growth

10. Why did you choose to learn to be an instructional coach?
11. How would you describe your growth from beginning as a coach until now?
12. What supports would you say you need to be even more successful in a coaching role?

For Collaborating Teachers

Views on Coaching

10. Why did you choose to work with an instructional coach?
11. How would you describe your growth from the beginning of the coaching relationship until now?
12. How would you describe the coaching relationship compared to other forms of professional development you have experienced?

Appendix I: Online Survey Consent Form for Coaches

ONLINE SURVEY CONSENT FORM
Study #19-102

Title of Research Study: Coaching for change: Teacher perceptions of the impact of personalized, reflective professional development on practice

Researcher's Contact Information:
Emily Davis
470-254-9280
edavis81@students.kennesaw.edu

Introduction

You are being invited to take part in a research study conducted by Emily Davis of Kennesaw State University. Before you decide to participate in this study, you should read this form and ask questions about anything that you do not understand. You must be at least 18 years old to participate.

Description of Project

The purpose of this study is to provide a more formalized structure for developing teacher coaches. Anticipated findings include a framework for developing instructional coaches using a reflective action cycle during the coach development process. This study will collect data through the use of surveys, interviews, classroom observations, and written reflections. Participants will be provided training on coaching and will practice these principles when working with peers.

Explanation of Procedures

Participants will complete a pre- and post-study self-evaluation of coaching skills and dispositions. Participants will be trained in adult learning theory and change theory and will apply these understandings as instructional coaches in training. Participants will work with peers to develop more student-centered teaching practices. Coaches-in-training will observe the classrooms of their collaborating teachers and examine changes in teacher practice based on collaboration with the instructional coach.

Time Required

Participant surveys will take approximately 30 minutes to complete. Monthly coaching trainings will last for approximately one hour each. Coaches in training will conduct pre-observation conferences lasting approximately 30 minutes and observe their collaborating teachers for a minimum of 30 minutes each month. They will conduct reflective follow-up sessions lasting between 30 minutes to one hour. Reflection prompts can be answered in 15-20 minutes.

Risks or Discomforts

Risks include minimal discomfort when working with peers. Additionally, participants may experience anxiety when conducting coaching conversations and providing feedback to peers. Social relationships could be impacted.

Benefits

Potential benefits include strengthening skills as an instructional coach and teacher leader. Additionally, participants may impact the practice of others in regard to student-centered teaching, which could positively impact academic environments within the school.

Compensation

No compensation is included in this study.

Confidentiality

The results of this participation will be confidential. Pseudonyms will be used when reporting data. Participant names will be redacted from hard copy documents. Electronic data will be stored on a password protected encrypted USB drive (Kingston Digital 4GB Data Traveler AES Encrypted Vault Privacy 256Bit 3.0). Hard copy documents and the encrypted USB will be housed in a locked filing cabinet in a secure office at the school.

Inclusion Criteria for Participation

Participants will be adults aged 23 or older who agree to the terms of the study. Participants will be members of the technology leadership team and teachers agreeing to collaborate for the purposes of this study. You must be at least 18 years old to participate.

Use of Online Survey

IP addresses will not be collected for online survey data.

Research at Kennesaw State University that involves human participants is carried out under the oversight of an Institutional Review Board. Questions or problems regarding these activities should be addressed to the Institutional Review Board, Kennesaw State University, 585 Cobb Avenue, KH3403, Kennesaw, GA 30144-5591, (470) 578-2268.

PLEASE PRINT A COPY OF THIS CONSENT DOCUMENT FOR YOUR RECORDS, OR IF YOU DO NOT HAVE PRINT CAPABILITIES, YOU MAY CONTACT THE RESEARCHER TO OBTAIN A COPY

☐ I agree and give my consent to participate in this research project. I understand that participation is voluntary and that I may withdraw my consent at any time without penalty.

☐ I do not agree to participate and will be excluded from the remainder of the questions.

Appendix J: Online Survey Consent form for Collaborating Teachers

ONLINE SURVEY CONSENT FORM
Study #19-102

Title of Research Study: Coaching for change: Teacher perceptions of the impact of personalized, reflective professional development on practice

Researcher's Contact Information:
Emily Davis
470-254-9280
edavis81@students.kennesaw.edu

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Explanation of Procedures

Participants will complete a post-study of coaching skills and dispositions exhibited by the coach in training. Participants will work with a peer coach to develop more student-centered teaching practices. Coaches-in-training will observe the classrooms of their collaborating teachers and examine changes in teacher practice based on collaboration with the instructional coach.

Time Required

Participant surveys will take approximately 30 minutes to complete. Collaborating teachers will participate in goal setting conferences lasting approximately 30 minutes once a month. Collaborating teachers will be observed by their peer coach for a minimum of 30 minutes each month and participate in reflective follow-up sessions lasting between 30 minutes to one hour.

Risks or Discomforts

Risks include minimal discomfort when working with peers. Additionally, participants may experience anxiety when participating in coaching conversations and receiving feedback from peers. Social relationships could be impacted.

Benefits

Potential benefits include strengthening student-centered teaching skills. Additionally, participants may impact the student achievement by shifting to student-centered teaching practices, which could positively impact academic environments within the school.

Compensation

No compensation is included in this study.

Confidentiality

The results of this participation will be confidential. Pseudonyms will be used when reporting data. Participant names will be redacted from hard copy documents. Electronic data will be stored on a password protected encrypted USB drive (Kingston Digital 4GB Data Traveler AES Encrypted Vault Privacy 256Bit 3.0). Hard copy documents and the encrypted USB will be housed in a locked filing cabinet in a secure office at the school.

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☐ I agree and give my consent to participate in this research project. I understand that participation is voluntary and that I may withdraw my consent at any time without penalty.

☐ I do not agree to participate and will be excluded from the remainder of the questions.

Appendix K: Signed Consent—Coaches

SIGNED CONSENT FORM: Coaches
Study #19-102

Title of Research Study: Coaching for change: Teacher perceptions of the impact of personalized, reflective professional development on practice

Researcher's Contact Information:
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Explanation of Procedures

Participants will complete a pre- and post-study self-evaluation of coaching skills and dispositions. Participants will be trained in adult learning theory and change theory and will apply these understandings as instructional coaches in training. Participants will work with peers to develop more student-centered teaching practices. Coaches-in-training will observe the classrooms of their collaborating teachers and examine changes in teacher practice based on collaboration with the instructional coach.

Time Required

Participant surveys will take approximately 30 minutes to complete. Monthly coaching trainings will last for approximately one hour each. Coaches in training will conduct pre-observation conferences lasting approximately 30 minutes and observe their collaborating teachers for a minimum of 30 minutes each month. They will conduct reflective follow-up sessions lasting between 30 minutes to one hour. Reflection prompts can be answered in 15-20 minutes.

Risks or Discomforts

Risks include minimal discomfort when working with peers. Additionally, participants may experience anxiety when conducting coaching conversations and providing feedback to peers. Social relationships could be impacted.

Benefits

Potential benefits include strengthening skills as an instructional coach and teacher leader. Additionally, participants may impact the practice of others in regard to student-centered teaching, which could positively impact academic environments within the school.

Compensation

No compensation is included in this study.

Confidentiality

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Inclusion Criteria for Participation

Participants will be adults aged 23 or older who agree to the terms of the study. Participants will be members of the technology leadership team and teachers agreeing to collaborate for the purposes of this study. You must be at least 18 years old to participate.

Signed Consent

I agree and give my consent to participate in this research project. I understand that participation is voluntary and that I may withdraw my consent at any time without penalty.

_____

Signature of Participant or Authorized Representative, Date

_____

Signature of Investigator, Date

PLEASE SIGN BOTH COPIES OF THIS FORM, KEEP ONE AND RETURN THE OTHER TO THE INVESTIGATOR

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Appendix L: Signed Consent—Collaborating Teacher

SIGNED CONSENT FORM: Collaborating Teachers
Study #19-102

Title of Research Study: Coaching for change: Teacher perceptions of the impact of personalized, reflective professional development on practice

Researcher's Contact Information:

Emily Davis
470-254-9280
edavis81@students.kennesaw.edu

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The purpose of this study is to provide a more formalized structure for developing teacher coaches. Anticipated findings include a framework for developing instructional coaches using a reflective action cycle during the coach development process. This study will collect data through the use of surveys, interviews, classroom observations, and written reflections. Participants will work with coaches in training as they practice learned coaching procedures.

Explanation of Procedures

Participants will complete a post-study of coaching skills and dispositions exhibited by the coach in training. Participants will work with a peer coach to develop more student-centered teaching practices. Coaches-in-training will observe the classrooms of their collaborating teachers and examine changes in teacher practice based on collaboration with the instructional coach.

Time Required

Participant surveys will take approximately 30 minutes to complete. Collaborating teachers will participate in goal setting conferences lasting approximately 30 minutes once a month. Collaborating teachers will be observed by their peer coach for a minimum of 30 minutes each month and participate in reflective follow-up sessions lasting between 30 minutes to one hour.

Risks or Discomforts

Risks include minimal discomfort when working with peers. Additionally, participants may experience anxiety when participating in coaching conversations and receiving feedback from peers. Social relationships could be impacted.

Benefits

Potential benefits include strengthening student-centered teaching skills. Additionally, participants may impact the student achievement by shifting to student-centered teaching practices, which could positively impact academic environments within the school.

Compensation

No compensation is included in this study.

Confidentiality

The results of this participation will be confidential. Pseudonyms will be used when reporting data. Participant names will be redacted from hard copy documents. Electronic data will be stored on a password protected encrypted USB drive (Kingston Digital 4GB Data Traveler AES Encrypted Vault Privacy 256Bit 3.0). Hard copy documents and the encrypted USB will be housed in a locked filing cabinet in a secure office at the school.

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_____

Signature of Participant or Authorized Representative, Date

_____

Signature of Investigator, Date

PLEASE SIGN BOTH COPIES OF THIS FORM, KEEP ONE AND RETURN THE OTHER TO THE INVESTIGATOR

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